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EDITOR'S DESK

In this issue

The overarching theme for this issue is *Outcomes from learning*. The first couple of papers discuss forms of outcomes based training – an overview of the theoretical and social origins of competency-based training (**Stephen Hodge**) and a specific case of implementation with youth workers (**Andrew Wojecki**). The third analyses an holistic approach to training to achieve a range of vocational and social capital outcomes (**Donna-Louise McGrath**). The fourth focuses on teaching for social capital outcomes and what adult literacy teachers do to promote the development of such outcomes (**Jo Balatti**, **Stephen Black** & **Ian Falk**). The fifth and sixth papers concentrate on research into outcomes that derive from the use of online learning in Open University courses (**Wendy Knightley**), and from the use of videotaping as a research tool in adult and basic education (**Ali Abasi** & **Maurice Taylor**). The seventh paper reports on the outcomes from an adult learning centre's policies and practices in teaching technology to older adults and in making policy-makers more aware of successes in this field (**Michael Nycyk** & **Margaret Redsell**).

There are also a number of subsidiary themes in this issue that are common and cut across these articles. One is *technology*: e-learning and online learning for socially disadvantaged adults (Knightley), gathering research data by video (Abasi & Taylor), ICT training for older adults (Nycyk & Redsell) and reviewing digital nations (review, **David Snewin**) all receive attention. A second is *literacy and numeracy*: issues relating to the embedding and contextualising of literacy and numeracy within training programs (McGrath), fostering social capital outcomes from literacy and numeracy courses (Balatti *et al.*), investigating how collaborative learning occurs in different types of adult literacy programs (Abasi & Taylor) and the building of professional pride in literacy (review, **Lisa Davies**) are raised in these contributions. A third is *research methods*: using interviews with staff and students to elicit information about pedagogy (Balatti *et al.*), telephone interviews followed by face-to-face interviews with adults who exhibit one or more indicators of social exclusion (Knightley), methodological issues in using video to capture adult student interactions (Abasi & Taylor), interviews of older adult learners and observations of lessons (Nycyk & Redsell), reflecting on how to 'discover' what makes a lifelong learner (**Robert White**), practical guides on how to use a range of qualitative research methodologies (review, **Tom Stehlik**) and capturing examples of research project management (review, **Ken Parry**) are topics analysed in this issue. And finally, the issue certainly exhibits an international flavour, with the authors and their data coming from America, Australia, the United Kingdom and Canada.

Conference travelling

This international flavour reminds me that many years ago I was mightily impressed, and highly amused, by David Lodge's accounts of worldwide conferencing in his brilliant novel, *Small world*. For example, he writes that the modern conference

> … resembles the pilgrimage of medieval Christendom in that it allows the participants to indulge themselves in all the pleasures and diversions of travel while appearing to be austerely bent on self-improvement. To be sure, there are certain penitential exercises to be performed – the presentation of a paper, perhaps, and certainly listening to the papers of others. But with this excuse you journey to new and interesting places, meet new and interesting people, and form new and interesting relationships with them; exchange gossip and confidences (for your well-worn stories are fresh to them, and vice versa); eat, drink and make merry in their company every evening; and yet, at the end of it all, return home with an enhanced reputation for seriousness of mind.

Despite Lodge's tongue-in-cheek tone throughout the book, I couldn't help reflecting how much I identify today with many of his observations. Nevertheless, I am daring here to acknowledge that I recently had the uplifting opportunity of participating in the 37th SCUTREA Annual Conference hosted by Queen's University in Belfast (SCUTREA is the Standing Conference on University Teaching and Research in the Education of Adults). It was distinctly international in flavour: of the 100 participants, 58% were from around ten countries other than the UK, including 17% from Canada, 10% Australia, 8% USA, 5% Eire, 4% African nations and 2% Sweden. The Chair duly noted that SCUTREA appeared to have 'achieved its aim of being more genuinely international, more global and less local, less parochial and less Anglo-centric' (conference newsletter, p.1). In the words of the conference newsletter, this international flavour was exhibited in:

- '… the diversity of issues raised in the papers,
- the breadth of issues discussed in any session, through different 'ways of knowing',
- the level of analysis, heightened whenever a comparative perspective was taken, and

- the social activities, particularly on the first evening, when the entertainment provided by *Saboid Dubh* went well beyond 'traditional' Irish music and *ceidhle*, with the participation of SCUTREA delegates yet again showing off an array of talent …' (including some Australians, I might add!)

What was interesting was that, for the very first time, SCUTREA offered the option of refereeing full papers rather than just abstracts. While the Committee is going to review the process to see whether they will repeat it for the next conference in Edinburgh, it seemed to me that the quality of many of the presentations was raised and that perhaps it is another indication of the worldwide emphasis on increased quality (or is that merely an Aussie perspective, given our preoccupation with the impending Research Quality Framework?).

Congratulations to Donna Rooney from the University of Technology, Sydney for winning, for the second time in succession, the Tilda Gaskell Award for Best Student Paper 2007. Donna is a previous contributor to this journal (e.g. vol. 44, no. 2, July 2004, pp. 143–157).

Ulster People's College

Along with Tony Brown (former ALA Director) and some others, one of the field visits during the conference that I made was to the Ulster People's College, established in the late 1970s by, amongst others, Tom Lovett, and influenced by Highlander in the USA. Its aim has been to provide an open space for dialogue, education and training for people in the burgeoning adult community sector which was emerging in response to the democratic deficit of Direct Rule. Since then, the College's work has continued to evolve and to mirror developments in Northern Ireland, including the peace process. Today the College offers training and development work in the areas of community development and active citizenship and works across Northern Ireland and beyond.

The Prospectus informs us that the College's mission is 'to contribute through education, training and development to a just, democratic and non-sectarian society with improved social and economic conditions and participation for those who have been disadvantaged and excluded'. The focus of its programs is on community development 'to enable social and economic regeneration and on political development to enable real democracy and expression of citizenship'.

During the visit, we had the opportunity to hear from the Director, Johnston Price, about projects engaged in by the College and about approaches used by the College in working with marginalised communities, interface communities and hard-to-reach learners. Given the momentous strides taken in Northern Ireland in the last few months, it was an opportune time – and I felt very privileged – to visit this adult learning institution that has done, and is continuing to do, so much to further peace in this troubled land.

2007 ALA 47th Annual National Conference

From Belfast to Cairns! This year the Adult Learning Australia (ALA) Annual National Conference will be held on 8–10 November at the Cairns International Hotel, 17 Abbott Street, Cairns, Queensland. This conference is for people across all adult learning settings – researchers, practitioners, administrators, policy-makers and learners alike.

The conference theme is ***Understanding today's literacies***. Its theme will examine and explore the importance of developing and supporting adult literacies in both communities and workplaces. Under this theme there are seven streams:

- Workplace literacy
- Literacy as a skilling pathway (the three 'Rs')
- Financial literacy

- Environmental literacy
- E-Learning and Information and Communication Technologies (ICTs)
- Literacy in the community
- Research and policy literacies

The aim of this conference is to explore how these new literacies are shaping the ways we live and work, and particularly to consider the implications for teaching, training and learning.

The conference will have workshops (60 minutes) which will be mainly directed at practitioners in the field of adult learning, and seminars (60 minutes) that will provide researchers with the opportunity to talk about their current research activities or to give conceptual papers. There will be the option for papers to be refereed according to the *Australian Journal of Adult Learning* guidelines.

More information about the conference theme and streams can be obtained from: http://www.ala.asn.au/conf/2007/confnotes

Roger Harris
Editor

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The origins of competency-based training

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This article attempts to trace the origins of competency-based training (CBT), the theory of vocational education that underpins the National Training Framework in Australia. A distinction is made between societal and theoretical origins. This paper argues that CBT has its societal origins in the United States of America during the 1950s, 60s and 70s. Public debate and government initiatives centred on the widely held view that there was a problem with the quality of education in the United States. One of the responses to this crisis was the Performance-Based Teacher Education movement which synthesised the theory of education that became CBT. The theoretical origins of CBT derive principally from behaviourism and systems theory – two broad theoretical orientations that influenced educational debate in the United States during the formative period of CBT. Most of the component parts of CBT were contributed by specialists with a background in one or both of these theoretical orientations.

Introduction

The Australian National Training Framework – the government-endorsed national system of vocational education and training (VET) – rests on the principles of competency-based training (CBT). However, contemporary practitioners within Australia's VET system are often only vaguely aware that CBT was once a hotly contested issue. Furthermore, training practitioners often do not know the societal and theoretical origins of CBT. But these origins are not necessarily of mere historical interest. Although CBT appears to be something of a 'given' in the Australian VET scene, it remains an essentially volatile system set within a dynamic context. As the needs of VET stakeholders change and as research and practice in VET reveal new problems and possibilities, CBT will change and potentially transform. When this occurs the 'genetics' of CBT will play a part in the shape it eventually takes.

However, at this stage there are few resources for researchers on the history of CBT. In the clamorous rush to implement CBT, there has been little effort to chronicle the genesis of the movement. A few pages can be found in synoptic works by authors such as Houston (1974), Norton, Harrington and Gill (1978), Tuxworth (1989) and Harris, Guthrie, Hobart and Lundberg (1995), but these accounts are mostly sketches designed to contextualise substantial treatments of problems of interpretation and implementation. The present article represents an attempt to amplify and structure the accounts found in these and other texts in order to trace the genetics of CBT. Content analysis was applied to a body of texts from the 1950s, 60s and 70s to confirm the indications supplied by Tuxworth (1989) and Harris *et al.* (1995) regarding the early phase of CBT development and to guide the articulation of the discussion.

The following discussion is structured by a distinction between *societal* and *theoretical* origins of CBT. This distinction is introduced because a treatment of the theoretical underpinnings alone would not account for the synthetic unity displayed by the system of CBT. There is no single theoretical principle that serves to integrate the various aspects of CBT. However, an understanding of the political and social forces at work in the formation of CBT helps to explain the juxtaposition of theoretical elements that characterises the CBT system in use today. The metaphor of genetics applies most obviously to theoretical origins in that it is the theoretical components of CBT that manifest in the contemporary Australian VET system. Yet it should not be forgotten that CBT is an amalgam of separate theoretical components alloyed in the crucible of powerful political forces, and that responsiveness to social and cultural pressures remains a significant feature of CBT.

It should be noted here that, although the term covering the educational systems based on competencies in Australia today is 'CBT', a number of different terms for the same or similar developments have emerged. Thus phrases that include 'Performance-Based Teacher Education' (PBTE), 'Competency-Based Teacher Education', 'Competency-Based Education and Training', 'Competency-Based Vocational Education' and 'Competency-Based Education' feature in the literature. The original terms will be retained in the present discussion, however, because they are employed by the original writers, and because there is no denying the fact that CBT is a nuanced movement. Perhaps the only barrier to regarding the alternate terms as equivalent is that some controversy surrounded the choice of 'performance-based' or 'competency-based' in characterising the teacher education movement of the 1970s. As Norton, Harrington and Gill (1978) explain, preference for the term 'performance' indicated an emphasis on skills, while critics of the term believed that professional knowledge was undervalued by 'performance' and opted for 'competency' as the more appropriate name. However, following the suggestions of Norton, Harrington and Gill and other commentators such as Tuxworth (1989), the two terms will be treated here as equivalent.

Societal origins of competency-based training

That the history of CBT has its political and social determinants is acknowledged by a number of commentators. An early critic of the movement, educational philosopher Broudy (1972: iv), believed that PBTE was a response to 'social pressures' and 'an attempt to cope with certain societal conditions' rather than being the outcome of purely scientific facts and principles. However, Broudy's appraisal of PBTE is not native to a critical stance. On the contrary, the early advocate of competency based education, Houston (1974: 5–6), suggested that it evolved as part of a 'culturally based movement', citing factors such as the broad trend in American society towards 'accountability' and 'personalisation'.

To gain a useful picture of the societal origins of CBT it will be sufficient to focus on the United States in the 1950s, 60s and 70s. This is not to say that nothing of consequence occurs before or after this period or outside America, but that simply the political catalyst of the movement was the American reaction to perceptions about Soviet Union technological progress that came to a head in the launch of Sputnik, and that the main outlines of CBT are established there by the end of the 1970s.

A range of commentators agree that Sputnik created the impetus for the changes that lead to the development of CBT (for example, Norton, Harrington & Gill 1978, Britell 1980, Harris *et al.* 1995). On October 4, 1957, the Soviet Union succeeded in placing the first artificial satellite called 'Sputnik I' into orbit around the earth. The impact of the Sputnik launch on the American psyche was significant. At that time, the Americans were busy with their own satellite project, and were confident that the glory of being the first in space would be theirs. The successful launch by the Soviets caught America by surprise and wounded their pride. As Harris *et al.* report, the immediate reaction of the United States was to 'undertake some deep soul searching with respect to its education and training system' (1995: 37). After all, if Soviet Union technology was more advanced than America's, then the very foundation upon which American technological superiority was supposed to rest – its education system – was obviously the source of the problem. This general estimation of the effect of Sputnik on United States educational debate is widely held (e.g. Grouws & Cebulla 2000, Foster 1997, Elam 1971).

According to Elam (1971: 2), Sputnik served to legitimise and operationalise a federal role in education. The first official step in this process occurred in 1958 when the United States Congress passed the National Defence Education Act. The purpose of this act was stated in the Findings and Declaration of Policy section:

> The Congress hereby finds and declares that the security of the Nation requires the fullest development of the mental resources and technical skills of its young men and women. The present emergency demands that additional and more adequate educational opportunities be made available. The defence of this Nation depends upon the mastery of modern techniques developed from complex scientific principles. It depends as well upon the discovery and development of new principles, new techniques, and new knowledge. We must increase our efforts to identify and educate more of the talent of our nation.

With this Act began two decades of vigorous Federal intervention in education and training. According to Harris *et al.* (1995: 37) 'Large sums of money, in the late 1950s and throughout the 1960s and 1970s were directed towards curricular development in the sciences and vocational education programs. This gave economic support to the development of CBT'.

Norton *et al.* (1978) point to another important stimulus to the development of CBT that arose in the early 1960s. They describe how disquiet about dropout rates from secondary schools and difficulties experienced by graduates in securing and maintaining employment in the early 1960s lead to the constitution by President Kennedy of a

national panel to review vocational programs and legislation (1978: 8). As a result of the report produced by this panel, the Vocational Education Act of 1963 was enacted, which altered conceptions of work and funded the development of vocational education institutions. According to Norton *et al.* (1978: 8), this legislation lead to an unprecedented growth in vocational education and increased the demand for more and better prepared teachers.

Meanwhile, in the public debate about the crisis in education in the United States, attention turned to the quality of teacher preparation. Writers such as Conant (1963) and Korner (1963) criticised existing teacher education programs on the grounds that they were not based on actual work requirements, that instruction was not tailored to individual requirements, and that outcomes were not being evaluated (Norton *et al.* 1978: 8). Norton *et al.* (1978) describe how the United States government responded to these criticisms in 1965 with the Elementary and Secondary Education Act. Among other objectives, this legislation promoted research into the improvement of teacher education programs.

Facilitated by the Elementary and Secondary Education Act, a decisive event in the evolution of CBT occurred in 1968 when the United States Office of Education's (USOE) National Centre for Educational Research called for tenders to develop 'Comprehensive Elementary Teacher Education Models'. Norton *et al.* (1978: 8) note that the request for tenders specified that the models needed to include the use of behavioural objectives and systems analysis. According to Swancheck and Campbell (1981, in Tuxworth 1989: 11), the models produced by the ten institutions that won the tenders were characterised by 'the precise specification of competencies or behaviours to be learned, the modularisation of instruction, evaluation and feedback, personalisation, and field experience'.

Two issues in the public debate in the United States at the end of the 1960s also had an impact on the development of CBT. In his account

of competency-based education as a 'cultural movement', Houston (1974) identified the significance of both the 'personalisation' movement and the 'accountability' movement. He cited the work of Toffler (1970 in Houston, 1974: 6–7) who observed a major shift towards transience and uniformity in American society, signalled by such phenomena as disposable consumer goods, the regularity with which families in the United States moved house, depersonalisation of violence and job specialisation. Against this tide, Houston suggests that a deep-rooted American desire for 'individualised and personalised treatment' was making itself felt, particularly in 'youth culture' (1974: 7). Norton *et al.* (1978) also affirmed the influence of the personalisation movement, suggesting that it had its roots in student radicalism in university campuses. They claimed that students made the demand for instruction that was relevant to individual needs rather than the needs of a 'mythical majority' (p. 9).

Houston (1974) believed the emphasis on accountability – the common expectation that professionals will be knowledgeable in their fields and employ that knowledge successfully in practice – was given an effective contemporary form by the appearance of new and more accurate measuring tools (1974: 5–6). He sees the drive to accountability as having its source in the commercial and industrial sector of society. Norton *et al.* (1978) reinforced Houston's emphasis on the accountability movement as a factor in the evolution of CBT. They suggested that the educational commentator Lessinger instigated and lead the accountability movement through his book, *Every kid a winner: accountability in education* (1970). According to Norton *et al.* (1978: 9), this book aroused interest in measuring the outcomes of public education programs.

The influence of the personalisation and accountability movements combined with the impetus provided by the Comprehensive Elementary Teacher Education Models program of the USOE initiated the Performance-Based Teacher Education (PBTE) movement,

which brought together many of the new ideas about education and training that were circulating in the 1960s. The PBTE movement received substantial support from the Bureau of Educational Personnel Development within the USOE through the 1970s. During this period the movement sought to clarify its own problems and concepts. Important contributions to this effort were made by the Committee on Performance-Based Teacher Education established by the American Association of Colleges for Teacher Education (AACTE). This committee was given responsibility to 'study the many efforts currently taking place in the United States in the area of performance-based teacher education. Based on this study, the Committee is further charged to give direction to these developments…' (Elam 1971: iii). The first report issued by the Committee (funded by the Texas Education Agency under contract with the USOE) was the seminal *Performance-based teacher education. What is the state of the art?* prepared by Elam (1971). This paper surveyed the field of PBTE, and specified 'essential', 'implied' and 'desirable' characteristics of PBTE programs. Elam (1971: 7) stated that only those professional teacher training programs that included all of the essential elements would fall within the AACTE definition of PBTE. Elam's *essential* characteristics of a PBTE program were:

1. Competencies (knowledge, skills, behaviors) to be demonstrated by the student are
   - derived from explicit conceptions of teacher roles,
   - stated so as to make possible assessment of a student's behavior in relation to specific competencies, and
   - made public in advance;
2. Criteria to be employed in assessing competencies are
   - based upon, and in harmony with, specified competencies,
   - explicit in stating expected levels of mastery under specified conditions, and
   - made public in advance;

3. Assessment of the student's competency
   - uses performance as the primary source of evidence,
   - takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behaviour, and
   - strives for objectivity;
4. The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completion;
5. The instructional program is intended to facilitate the development and evaluation of the student's achievement of competencies specified (Elam 1971: 6–7).

Elam's (1971) list of essential criteria for PBTE programs is so significant in the development of CBT that they are regularly quoted in texts dealing with the origins of CBT (e.g. Houston 1974: 9, Tuxworth 1989: 15, Harris *et al.* 1995: 18–19). Throughout the 1970s attempts were made to build on and refine these criteria, for example Houston and Howsam (1972), Burke, Hansen, Houston and Conant (1975) and Norton *et al.* (1978), although none of Elam's (1971) original essential criteria were subsequently disavowed.

In parallel with the federal government's efforts to shape and operationalise the theory of PBTE was a push by state governments to introduce certification policies linked to PBTE. Tuxworth (1989: 12) explained that for many administrators, politicians and state certification agencies the PBTE movement carried a high level of 'face validity'. It seemed obvious that, with the development of agreed and public performance standards for teachers and objective assessment mechanisms, societal demands for accountability and quality improvement in education could potentially be satisfied. An over-supply of teaching college graduates facilitated the implementation of the certification policies (Tuxworth 1989: 13).

The USOE continued its support for PBTE in the 1970s despite criticisms ranging from complaints about the theoretical coherence of the movement to outcry over the lack of objective evidence for the success of the movement and a backlash against over-hasty introduction of competency-based programs (Tuxworth 1989: 12). By the end of the 1970s, the teacher education reform movement – at this stage also referred to as 'competency'-based rather than just 'performance'-based education – had matured into an orthodoxy entrenched in the majority of teacher training institutions in the United States. The theoretical underpinnings of the movement, meanwhile, had cohered into a consistent framework characterised by a level of sophistication that made it appeal to training and education reformers both outside the context of teacher preparation and outside of the United States. The next section focuses on these theoretical underpinnings.

Theoretical origins of competency-based training

An analysis of the theoretical underpinnings of CBT brings to light two kinds of bases: broad *influences* and specific *contributions*. The theoretical influences serve to contextualise and coordinate the theoretical contributions, while the contributions themselves are the actual techniques, principles and rules that govern the practice of the professionals who organise and implement CBT. The two key theoretical influences on the development of CBT are behavioural psychology and systems theory. In the case of the theoretical contributions, they have been categorised according to the aspects of CBT to which they contribute: the objectives, the learning process or the assessment.

Theoretical influences on CBT

The significance of both behavioural psychology and systems theory for the development of CBT is explicitly acknowledged by McDonald (1974: 17), but can also be traced in the specifications for the 1968

Comprehensive Elementary Teacher Education Models program that was so important for the evolution of CBT. However, the original conjunction of these two theoretical frameworks was brought about for the improvement of training by psychologists and other personnel development experts working for the United States armed forces in the 1940s and 1950s. During World War II and the Cold War, the United States military encountered a range of human resource development challenges, ranging from the problem of preparing large numbers of competent combatants to the training of personnel to operate rapidly evolving advanced weapons systems. During this period, the United States military employed large numbers of specialists to study and overcome these challenges. By the time the Sputnik crisis quickened the research efforts of civilian educational authorities, the United States military was already well advanced in its attempts to find scientifically-grounded solutions to the question of how to design and execute the most effective training. The importance of the military contribution to the development of CBT can be gauged by events such as the United States Office of Naval Research-sponsored conference at the University of Pittsburgh in 1960 which brought together specialists including Robert Glaser, Robert Gagné, Bob Miller, John Carroll and Meredith Crawford (Glaser 1962). The purpose of this conference was to investigate how advances in educational psychology arising from research into the needs of the United States military could be applied to general problems in education and training. Over the next few years, members of this group laid much of the theoretical groundwork of CBT through the development of the theory of 'educational technology'.

Most of the psychologists who lent their efforts to the problem of effective training in the United States military came from a behavioural background. Behavioural psychology or 'behaviourism' drew its inspiration from the tradition of 'British Empiricism'. This latter philosophy worked on the premise that our sensory experience is the ultimate foundation of our knowledge. While this may sound

obvious and common-sensical to our current way of thinking, it must be noted that there was a time when philosophers and even scientists believed that knowledge was in some way innate in us, or somehow transmitted directly to our minds through divine sources. It was therefore something of a revolutionary act when John Locke (1690: 89) argued that at birth the human mind is a clean slate or 'white paper devoid of characters' and that our sensory or 'empirical' experience furnishes us with knowledge over time. As Gagné (1965: 7–8) points out in his survey of the history of learning theory, this British approach to the philosophy of mind was given an American twist by thinkers such as William James and John Dewey who believed that the real question was not so much how our *knowledge* is derived from experience, but how our *action* is shaped by experience. Gagné emphasises the American tendency to favour questions about action rather than ideas in his account.

Empiricism – also called 'associationism' due to the stress placed on the problem of the association between sensation and our thoughts or actions – influenced the early development of scientific enquiry into the mind or 'psychology'. However, at first the discipline of psychology got caught up in a complex and apparently interminable argument concerning the precise nature of mental entities and exactly how scientific experiments could be conducted to generate objective knowledge of psychological phenomena. Controversy raged between so-called 'functionalists' and 'structuralists', although both sides accepted the methodology of 'introspection' as the way to gain access to mental phenomena (e.g. Titchener 1898). This 'experimental' method involved concentrating on subjective experience and reporting it in a systematic way. Problems arose in regard to the consistency and replicability of findings produced using introspection, but it was not the method but rather the adequacy of the researcher's ability to employ introspection that was called into question (Titchener, 1912).

In 1913 the American scientist John B. Watson published a strong critique of associationist psychology, arguing that the method of introspection was the real source of the controversies within psychology. Watson's early work was on learning in rats, during which time he found that he was able to frame and test hypotheses regarding this learning that were expressed purely in terms of the externally observable behaviour of the animals. In his 'Psychology as the behaviorist views it' (1913), he suggested on the basis of Darwin's new theory that animal and human life actually formed a continuum, and it was legitimate to transfer the method he used in his experiments on rats to the study of learning in humans. In other words, he proposed to study human psychology solely in terms of observable behaviour. The corollary of this approach was, just as the experiments on learning in animals did not appeal to mental states in the subjects, it would not be necessary to deal directly with mental states in human subjects. Watson (1913: 3) concluded that '[t]he time seems to have come when psychology must discard all reference to consciousness…'. In Watson's view, by focusing exclusively on describing and understanding objectively observable behaviour, psychology could be regarded as a true science for the first time.

The new American School of behaviourist psychology was fundamentally concerned with animal and human learning, since it is only by manipulating behaviour and observing resulting changes that causal relationships can be identified and described. The concepts of reflex, stimulus and response which became central to behavioural learning theory were drawn from the work of Pavlov, a Russian physiologist interested in animal behaviour. He explained that the notion of 'reflex' was pioneered by the sixteenth century philosopher Descartes who believed that the physical body could be regarded as a machine (Pavlov 1927: 4). In Descartes' theory, a necessary connection ('reflex') existed between a given external influence on the organism ('stimulus') and the resulting reaction by the organism ('response'). Pavlov found Descartes' schema, with its

strict determinism, useful in describing his work on manipulating the behaviour of dogs. Pavlov made a significant contribution to learning theory by conceptualising the difference between unconditioned and conditioned reflexes (Pavlov 1927: 25). According to Pavlov, innate reflexes (responses to stimuli with which we are supposedly born) can become modified or conditioned through external events, for example when a dog salivates because it has detected the preparation of food. In this case a conditioned stimulus (the activity of food being prepared) has become substituted for an unconditioned stimulus (the taste of the food). In Pavlov's language, the new stimulus is said to be 'reinforced' by the unconditioned stimulus, and can become established so that the conditioned stimulus alone initiates the reflex (Pavlov 1927: 25). Pavlov famously submitted the process of the formation of conditioned reflexes to experimental study and was able to describe relationships between conditioned and unconditioned stimuli in quantitative terms.

Also working in the early part of the twentieth century, Thorndike advocated the study of the externally observable behaviour of organisms (including humans) as a way to supplement explanations that depended on the postulation of states of consciousness (Thorndike 1911: 2). Thorndike and Pavlov did their early work in ignorance of each other, although they shared a vision of a science of behaviour derived from the study of animals and humans alike under experimental conditions. One of Thorndike's key experiments involved placing cats in an environment that included levers which, when pressed, would lead to the appearance of food. Thorndike measured the time taken for the animals to accidentally activate the lever and then repeated the conditions until the subject would use the lever without delay when exposed to the same conditions (Skinner 1953: 60). Charting these measurements, Thorndike demonstrated that his subjects followed 'learning curves' on the way to proficiency with their environments, and accounted for the 'stamping in' of the

efficacious behaviour with the concept of the 'Law of Effect' (Skinner 1953: 60).

Skinner accepted the strict doctrine of behaviourism espoused by Watson and at the same time built on the work of Pavlov and Thorndike in the area of learning theory. His major contribution to behaviourism was the theory of 'operant conditioning'. While he admired the work of Pavlov, he believed that the concept of the reflex as conceived by Pavlov failed to explain the full range of learning phenomena (Skinner 1953: 56). In particular, he thought that Pavlov's conditioned reflexes could only account for very basic behaviour, especially in humans, since the modification of behaviour was only effective when the stimulus was systematically manipulated. Skinner saw Thorndike's work as suggesting the more fruitful direction for research because Thorndike's subjects elicited the reinforcement by their own behaviour, not through the decision of the experimenter (Skinner 1953: 62). Skinner experimented on pigeons, determining in advance that a certain kind of behaviour – 'operant behaviour' – would serve to trigger reinforcement. The experimenter would simply wait until the operant behaviour manifested and then apply the reinforcement, which was generally food given to hungry birds. Skinner created the idea of 'shaping' behaviour towards very specific forms by gradually narrowing the effective range of operant behaviour. For example, if the desired behaviour of the pigeon was pecking at a spot on the wall, the operant behaviour might initially be any movement by the bird in the direction of the target wall, and then any movement towards the spot on the wall and then finally only pecking at the spot. By shaping behaviour through gradually focussing operant behaviour, Skinner (1953: 63–66) was able to rapidly teach his subjects a wide repertoire of specified behaviours.

The theory of behaviourism with its emphasis on learning theory has strongly influenced the development and general approach of CBT. The emphasis in CBT on the expression of competencies

in 'behavioural' terms and the focus in CBT assessment on the observable behaviours of the learner are the more obvious legacies of behavioural psychology. When we deal shortly with specific contributions to CBT, it will become clear that there are many more elements of CBT that bear the behavioural imprint.

The second major theoretical influence on CBT is 'systems theory'. This inter-disciplinary philosophy was first treated explicitly in the work of Ludwig von Bertalanffy in the 1930s. Bertalanffy, a biologist and polymath, observed that where sciences deal with collections of interacting individual elements, for example economics or biology, theoretical descriptions of the phenomena display significant similarities, to the extent that a general theory of these 'systems' becomes possible (Bertalanffy 1955: 30). He wrote that 'there exist models, principles, and laws that apply to generalized systems or their subclasses, irrespective of their particular kind, the nature of their component elements, and the relations or 'forces' between them' (Bertalanffy 1955: 31). Although Bertalanffy saw systems theory as an alternative to the reductionism of science that sought to explain through reducing phenomena to their most basic units, he believed that strict mathematical description of system constants was possible. Bertalanffy defined a 'system' broadly as 'complexes of elements standing in interaction' (1955: 32). General aspects of systems include whether the system is open or closed (1955: 38–40), the purpose of the system (1955: 44–46) and entropy (1955: 40–44).

The application of systems theory to training was an upshot of the problems encountered by the United States military during World War II in preparing large numbers of people to take various roles. In her treatment of the relations between systems theory and training, Crawford (1962: 303–309) described large organisations as 'parent systems', the specific parts of the system that produce or directly contribute to the output of the parent system the 'operating subsystems', and the subsystems that support operations the

'personnel subsystem' and the 'training subsystem' (although these latter two may form a single subsystem). According to Crawford (1962: 305), one of the largest training subsystems ever invented was that of the United States Army during World War II. As Cold War tensions built during the 1950s and 60s, the refinement of systems theory as it applied to military training continued with important consequences for CBT. The focus was on the creation of 'man-machine systems' such as missile launch systems or fighter aircraft. The prevailing political climate demanded rapid development and deployment of such systems. Military systems theorists such as Gagné distinguished between machine system development and human 'component' development (1962: 4), and identified on the human development side phases that included task description, task analysis, job design, training, and performance measures. Kennedy (1962: 20) differentiated the issue of training for system operations into the specific problems of individual training, environmental supports, team training and system training.

Systems theory has had two enduring influences on CBT. On the one hand, there follows from the view of training as a personnel subsystem an emphasis on the orientation of training design to the systemic needs of the 'parent system' in which the training subsystem is embedded. The contemporary emphasis in CBT on relevance for industry has its theoretical roots in the conception of training as a subsystem. On the other hand, systems theory condoned the conceptual isolation of subsystems and the treatment of them as systems in their own right. As a consequence, training activities could be approached as an individual system, and a specific type of system came to be adopted as the ideal model of training. This kind of system – called 'cybernetics' – is a subclass of general systems theory (Bertalanffy 1955: 43) that was characterised by 'feedback loops'. The cybernetic model of the training system remains a powerful influence on CBT (e.g. McDonald 1974: 27).

The understanding of CBT as a system also helps to explain one of the difficulties in classifying CBT in relation to other theories of adult learning. The difficulty lies in the fact that CBT cannot be seen as a single theory of learning, but must be understood as an amalgam of theories in a dynamic relationship to its social context. In the language of systems theory, CBT is an 'open system', constitutionally responsive to a wide range of 'inputs'. The appropriateness and 'fit' of the theoretical components is determined primarily by the function they serve in the system rather than their inherent compatibility with each other. This principle of theoretical contiguity accounts for the fact that elements which are at odds with behaviourism on a strictly philosophical level can coexist in CBT. It is, then, the system aspect of CBT that holds the amalgam of heterogeneous theoretical components together and underlies the endurance of CBT as a collectivity.

Theoretical contributions to CBT

One of the most distinctive characteristics of CBT is the emphasis placed on the identification and expression of learning objectives, an emphasis reflected in the 'competency' within the title of the movement. The basic idea of emphasising educational objectives was given its definitive form in the work of educational theorist Ralph Tyler (1949). He believed that the weakness in the curriculum theory of his time was the failure to be clear about the purposes of curriculum. Tyler portrayed the prevailing approach to curriculum design as focused on the content of areas of knowledge. He rejected the notion that the content of the traditional academic disciplines was a sufficient basis for structuring curriculum. He criticised contemporary attempts to formulate goals of education because they expressed what the instructor would do rather than what the students were supposed to be able to do (1949: 44). Tyler argued that curriculum design should be determined by explicit curriculum

objectives expressed purely in terms of the changes the learning was supposed to produce in the *behaviour* of students.

Tyler's understanding of the importance of educational objectives and their role in the design of learning was elaborated in the work of Bloom (1956). Along with a 'committee of college and university examiners', Bloom set out to codify the field of educational goals. The group believed that the language and structuring principles – the 'taxonomy' – of objectives needed to be rendered consistent so that comparison and collaboration on the formation of objectives by educational professionals would be possible (1956: 20). Bloom's taxonomy is an important step on the way to CBT since it stresses the importance of the communicability of educational purposes. The taxonomy was also important because it structured the entire field of educational goals into the 'cognitive', 'affective' and 'psychomotor' domains (1956: 7), a structure which is closely related to the contemporary concept of competency as made up of knowledge, attitude and skill components.

However, the work of Tyler (1949) and Bloom (1956) is of limited relevance to training since they were chiefly concerned with objectives in the realm of *education*. In the early phase of the development of CBT, a distinction was made between education and training as such. According to Glaser (1962: 3–5), the distinction could be made in two ways. He says that training involves specificity of behavioural 'end-products', while these end-products cannot be known with any precision for education. The second way of distinguishing education and training focuses on whether learning experiences amplify individual differences or tend to produce uniformity of behaviour. In other words, training aims to teach individuals to perform similar behaviours, whilst education seeks to develop behaviours in the individual that are singular. Crawford's (1962: 302) treatment of the distinction follows Glaser's second account, and adds that training is something arranged and funded by 'parent systems' to develop

human components in operating systems, while education is generally funded by the individual. In the light of Glaser's and Crawford's conceptions of training, it is clear that learning objectives could not be borrowed from Bloom's taxonomy, but needed to be derived from the operational requirements of man-machine systems in the form of task analyses.

Early work on vocationally-oriented objectives was done by McGehee and Thayer (1961, in Miller 1962), Mager (1962) and Gagné (1962), although it was Miller (1962, 1963) who comprehensively articulated the methods necessary to determine training objectives. Miller's approach was influenced by the analyses of Taylor (1906) who studied the industrial workplace and articulated 'principles of scientific management'. Taylor (1906: 31) explained that one of the obstacles to the design and management of an efficient and productive workplace was the inconsistency of skills displayed by different qualified tradesmen. In Taylor's view, it was the traditional apprenticeship system with its 'rule-of-thumb' principles that produced this wide variation of proficiency in workers. But this situation created a problem for management that needed to be able to assume consistent skill levels for the design of efficient workflows. Taylor's (1906: 36–7) theory called for the break-down of jobs into definable tasks which would then form the basis of a scientific approach to increasing industrial productivity. Miller (1962: 33) also cites the influence of Gilbreth, who refined Taylor's ideas by working out how to quantify task design through 'time and motion studies' that could specify the component 'micromotions' of tasks. According to Miller (1962: 33–4), the theory of task analysis became critical during the 1950s when the United States Air Force was developing weapons systems at such a pace that personnel training needed to be undertaken before the production of equipment was complete. Close cooperation between engineers and training designers was necessary to identify the tasks that military personnel would be called upon to perform once the machinery was ready.

Miller (1962: 48–9) identified three kinds of information that could be used for task design: performance requirements for the system in which the task is embedded, ideally expressed in terms of context and time limits; the direct observation of tasks being performed; and interviews with operators and supervisors who could help determine both outstanding and ineffective behaviours. The functional requirements of tasks called for the specification of kinds and amounts of output required, and the identification of tolerance limits; input variables and conditions also needed specification, along with the equipment the operator was expected to use to transform inputs into outputs. The statement of these functional requirements lead to the task description. According to Miller (1962: 32), a 'good' task description will identify what criterion responses should be made to what task stimuli under what range of conditions. Miller (1962: 52) also advised that task descriptions should indicate what the machine operator was expected to do under unusual conditions, such as input overload or equipment failure, and that training needed to address such irregularities. Miller's analysis of task description requirements has been a pivotal influence on the way competency standards are structured and expressed within contemporary CBT.

The main contributions to the learning process in CBT come from behaviourism and 'mastery learning' theory. It is in the area of the learning process in CBT that behaviourism's influence is least certain. Perhaps this is due to the fact that, unlike the formulation of learning objectives and the assessment of learning in CBT, which as inherently public processes are amenable to behavioural analysis and description, the analysis of the process of learning with its private dimension readily resorts to the concept of the subjectivity of the learner, and subjectivity is a notion eschewed by behaviourism. However, behavioural learning theory has its own account of learning based on descriptions of the external aspects of the process.

Skinner's theory of operant conditioning, mentioned above, has influenced the development of CBT by contributing the conception of the learner as an active agent in the process of learning. It will be recalled that the difference between Pavlov's 'classical' conditioning and operant conditioning is that, in the former, reinforcement is applied in learning according to an externally applied schedule, whereas in operant conditioning the activity of the learner alone triggers reinforcement. The effectiveness of operant conditioning to shape behaviour depends in part on the speed with which reinforcement is delivered to the individual, while this reinforcement can take the relatively subtle form of the learner simply discovering that they have made the correct response. For Skinner (1954: 15–19), these facts recommended the application of operant conditioning principles to school learning, although traditional learning methods were ill-suited to implement his model. As a result, Skinner (1958: 39) advocated the use of 'teaching machines' and 'programmed learning' manuals that allowed the individual learner to receive timely reinforcement for displaying the desired behaviour. As a corollary, the role of the teacher would need to change from being the source of the content to be learned to a facilitator and trouble-shooter supporting the learning process (1954: 26–27). Other important implications were that learning content would need to be structured in such a way as to allow for learning in discrete chunks so that the shaping influence of reinforcement could be brought to bear at regular intervals, and that learners would progress at their own pace within certain limits (1965: 65).

Apart from the contributions of behaviourism to learning process concepts in CBT are those of mastery learning. This theory had an early precursor in the work of Kornhauser (1927) who made a number of recommendations for the reform of apprentice training. He criticised existing training methods on several grounds, including the allocation of fixed periods of time to the development of skills in apprentices. Kornhauser complained that this system failed to

recognise that 'one boy may be able to learn as much in a year as another learns in three or four years' (p. 217). He also blamed a lack of incentives for high apprentice drop-out rates, and believed that poor methods of instruction were common. Kornhauser's proposed reform of training was guided by two principles: that provision be made for wide differences of ability between individual apprentices, and that '[t]he immediate aims of the apprentice course and the ground to be covered are made quite definite and specific in the minds of those concerned – apprentice, apprentice supervisor, and management' (p.217). In addition, Kornhauser proposed that the progress of an individual apprentice be determined by level of ability, and that as a result, no set period of time was to be allocated for any part of the training, that 'proficiency' was to be measured by job tests and oral examinations as a basis for advancement, and that these tests were not only a measuring technique, but the 'goal, stimulus, and means of instruction' (p.217). Kornhauser's recommendations were influential in the early development of CBT, and share some features with the theory of learning advocated by Skinner.

The educational theorist Carroll (1963) provided the first complete model of mastery learning. He was concerned with the problem of improving the effectiveness of school instruction which at that time nurtured the achievement of only a minority of students. Carroll challenged this educational mindset with his 'model of school learning'. The fundamental assumption of his model was that 'the learner will succeed in learning a given task to the extent that he spends the time that he *needs* to learn the task' (p. 725). Carroll distinguished in his model between factors that stemmed from the individual learner (aptitude, or time needed to learn the task under ideal instruction, ability to understand instruction, and perseverance) and external conditions (the time allowed for learning, and the quality of instruction). He speculated that under- and over-achievement in learning could be traced back to specific combinations of these variables, and that systematically maximising time allowed for

learning and improving the quality of instruction would cater for individual needs, resulting in the success of the majority of learners (p. 730).

Bloom (1968) realised the potential of mastery learning by building on Carroll's model. His assessment of the reality of educational effectiveness in the United States indicated that only about one third of students could be said to 'succeed' in their years of schooling, while a third could be said to 'fail'. The remainder attained a barely adequate level of education. However, Bloom (1968: 3) suggested that by adopting mastery learning strategies, up to 95% of learners would succeed in their schooling. Bloom explained that '[t]here are many alternative strategies for mastery learning. Each strategy must find some way of dealing with individual differences in learners through some means of relating the instruction to the needs and characteristics of the learners' (p. 7). He argued that each strategy had to deal with the five factors identified by Carroll – aptitude, quality of instruction, ability to understand instruction, perseverance and time allowed for learning (1968: 2–3). One strategy proposed by Bloom (1968: 7) was to provide each student with individual tuition, but he conceded that this proposal would be too costly in practice. More realistic strategies he proposed were to allow students to learn at their own pace, guiding students in which courses they should or should not take and providing different streams for different groups of learners (p. 7). Another strategy Bloom (1968: 7) researched involved combining traditional group instruction with a regime of 'diagnostic procedures and alternative instructional methods' whereby students falling short of mastery were identified and provided with customised instruction that addressed individual needs. Bloom reported that this method succeeded in bringing a large proportion of students up to the desired standard of achievement. As a result of this research, Bloom (1968: 8–11) argued that preconditions of mastery learning were the specification of learning objectives and content for both students and teachers and the use of assessment procedures that allowed students

and teachers to recognise when instruction has been effective. In addition, Bloom recommended that courses or subjects be broken down into smaller learning units, and that student progress in these units be monitored through the application of 'formative' assessment. Through the use of this diagnostic technique – pioneered by Scriven (1967) – Bloom believed that mastery of each learning task could be ensured, and that timely feedback could be supplied to teachers and students for possible remedial action.

Bloom's notion of mastery learning represents a humanistic contribution to CBT. The emphasis on subjective and cognitive factors such as aptitude, ability to understand instruction and perseverance moves mastery learning beyond the ken of behaviourism. On the other hand, Bloom's (1968: 2) advocacy of mastery learning sprang from a humanist concern for the social and emotional consequences of the failure of the majority of learners to succeed in the traditional approach to education. Bloom (1968: 11) argued that the self-concept of students would be improved through mastery learning and the neuroses that he believed followed from painful and frustrating experiences at school could be avoided. He also suggested that mastery learning would contribute to a positive regard for learning in the majority of people that would lead to a broad enthusiasm for learning beyond the level of compulsory schooling (p. 11).

The final group of contributions to be considered here relate to the assessment of student performance. Glaser (1962) made a significant contribution to this area by distinguishing between 'norm-referenced' and 'content-referenced' measures of performance, and championing the use of the latter in training systems. He uses the term 'norm-referenced' to refer to the assessment of proficiency that measures a student's performance relative to that of other students. Results of this kind of assessment will disclose the standing of the student against a norm. However, as Glaser (1962: 20) points out, norm-referenced measures tell us little about how the student (and indeed

the group as a whole) performs in relation to the content of learning. In another treatment of assessment measures, Glaser (1963: 49) cited Thorndike as criticising norm-referenced testing for its 'relativity and indefiniteness'. Based on indications in earlier work by Flanagan (1951, in Glaser 1963) and Ebel (1960, in Glaser 1963), Glaser proposed that testing should refer rather to the subject matter or content of the program of learning and indicate whether the student has developed the 'terminal behaviours' intended in the design of the course. A further advantage of criterion-referenced assessment was that it would supply information for training designers on the effectiveness of their program.

Glaser's proposal for content-referenced performance measurement was refined during the 1960s and 70s by a number of theorists such as Popham and Husek (1972). During this period, it was assumed that criterion-referenced measures aimed to yield information regarding how near or far a testee's actual performance was from the criterion performance, although Popham and Husek (1972: 32) acknowledged the possibility of producing scores that are 'essentially "on-off" in nature', that is, the testee either did or did not achieve the criterion. They suggested that usually the measure will refer to a range of acceptable performance (pp. 32–33). Passing this kind of test might involve scoring 90% or higher on the criterion-referenced assessment. Towards the end of the 1970s, however, a movement with political and social roots advocated the use of 'Minimum Competency Testing'. It was believed that reporting whether a student had mastered course material or not was a sufficient educational measure, and that this approach would remove the stigmatising effect produced by reporting the ranking of students. Hambleton and Eignor (1980: 369) stated that a minimum competency test 'is designed to determine whether an examinee has reached a prespecified level of performance relative to each competency being measured'. They proposed that such testing would separate students into two categories: either 'master'/'competent' or 'nonmaster'/'incompetent', and would

produce as many competency decisions as there are competencies to be measured (p. 369). Hambleton and Eignor (1980: 370) noted that minimum competency tests were a form of criterion-referenced test, and needed to address the same issues in assessment design. With the advent of minimum competency testing theory, the transformation of criterion-referenced performance measurement into a procedure for determining whether a learner was 'competent' or 'not-yet-competent' (the terminology now used in CBT systems) was complete.

By the end of the 1970s, the PBTE movement had brought most of these theoretical contributions together into a comprehensive 'system'. The objectives of the new teacher education programs were to be expressed in behavioural terms, and be based on the analysis of actual work roles. Whether these analyses construed work roles in terms of performances or competencies, the emphasis remained on observable behaviours that could be made publicly available and would serve to guide the design of instruction and assessment. Instruction within the PBTE system itself focused on the student who was expected to be an active and responsible participant in educational programs that were designed to promote mastery of content defined by the program objectives. The assessment of student achievement in PBTE programs explicitly referred to the performance criteria specified in the program objectives, and aspired to indicate the extent to which the student could demonstrate mastery of the program content rather than their standing in relation to the achievement of other students.

Conclusion

This discussion has attempted to trace both the societal and theoretical origins of CBT. On the societal side, a number of political events and public debates in the United States in the 1950s, 60s and 70s have been identified as producing an environment that favoured the development of a certain kind of educational philosophy,

culminating in the PBTE movement of the 1970s. This movement drew upon theoretical resources grounded in behaviourism and systems theory that had been fruitfully combined by specialists concerned with the training of personnel in the United States armed forces. Humanist contributions to the development of CBT were also made in the form of mastery learning.

While the preceding discussion has outlined the *origins* of CBT, a range of other explorations would be necessary to produce a complete picture of the *evolution* of this movement that continues to have significant social implications in a number of countries (e.g. Argüelles & Gonczi 2000). For example, a treatment of the concept of competency would be necessary to exhibit the vicissitudes of the notion and the nuances in thinking regarding its ultimate components. Although competency is understood to be comprised of knowledge, skills and attitudes today, there have been other conceptions of the nature of competency as well as a struggle (alluded to in the introduction) over the appropriateness of the use of the concept to encapsulate the essence of the movement. A fuller understanding of the phenomenon of CBT would also be facilitated by an account of the international dimension of the movement. For example, developments in the UK beginning in the 1980s are of great significance to the movement. Finally, the Australian student of CBT would benefit from a detailed examination of the introduction and rise of the movement in this country where, after a period of uncertainty and controversy through the 1990s, it has now assumed such a strong position in VET policy and practice that it is almost difficult to imagine a different state of things.

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Crafting youth work training: synergising theory and practice in an Australian VET environment

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In the Australian vocational education and training (VET) context, attention is often given to what youth work training programs should consist of, resulting in less attention on how youth work education and training programs might be imagined, constructed and implemented. In this paper, a particular South Australian youth work training program is explored with the purpose of investigating the particular educational methodology employed and its impact in the structuring and delivery of a VET youth work education program. It emphasises that, in conceiving a competency-based youth work curriculum and its contribution toward the development of professional youth work identities, how the youth work educational program is delivered is just as important as what it should consist of.

Introduction

The role of reflection has emerged as an important practice for adult educators in enhancing the knowledge and skills required for fostering effective learning environments (Brookfield 2006). Self-study methodologies are emerging, further enabling adult educators to reflect and thicken their own knowledge about their educative practices (Dinkleman 2003) and personal epistemologies (Billett & Smith 2007). In this paper, I explore a youth work training program developed for youth workers living and working in regional and remote communities in South Australia. Rather than attempting to portray the experiences of the adult learners within this training program, I seek to explore my own learnings about teaching within a VET context which include my sense-making as a VET practitioner in Australia and in sharing my connections between theory and practice in fostering competency-based training programs within work environments. This paper illustrates how I design and tailor a competency-based training program to foster workplace learning and contribute toward the development of professional identities amongst a cohort of South Australian youth workers.

The educational methodologies and approaches of the youth work training program are influenced by theories of workplace learning (Rainbird, Fuller & Munro 2004). The key methodological elements shaping this training program are considered in order to demonstrate how this competency-based training program emphasises the learning occurring for the adult learners across multiple sites of youth work. In doing so, a contribution to youth work education is offered by transferring the focus and discussion from '*what*' youth work education should consist of, to '*how*' youth work education programs might be conceptualised and delivered. It is proposed that, when discussing professional youth work identities in an Australian context, 'how' youth work education programs are implemented is just as important as 'what' they should consist of, in contributing to building diverse and rigorous professional identities in youth work.

Sites of youth work as sites of learning

The development of this training program is heavily influenced by the literature on workplace learning (Billett 2002, 2004), organisational learning (Brown & Duguid 1991, Gherardi & Nicolini 2002) and adult education (Foley 2004). From these educational perspectives, three dimensions are considered: the working cultures of the participating workplaces, the type of youth work being conducted, and the context in which the youth work is occurring. This stance provides attention to how these workplace cultures either foster or stifle learning processes for youth workers, including a focus on the nature of the youth work practices involved (statutory youth work or non-statutory youth work, street-based or office bound, program facilitation or case management, etc.) and how youth workers guide their own learning and the learning of their peers (Billett 2003). Billett (1999) discusses, in framing the workplace as a site of learning, '[f]irstly, the kinds of activities that individuals engage in determine what they learn. Secondly, the kinds of guidance they access when engaged in that learning determines the quality of that learning' (p. 151). From this perspective of the workplace as a site of learning for youth workers, the training program is situated to emphasise the kinds of youth work in which participants are engaged as well as the work cultures surrounding their youth work practices.

Garrick (1999) demonstrates that there are competing discourses framing how learning is conceptualised within workplaces. He suggests that there are broader possibilities and metaphors for learning than the dominant, narrow interpretations of learning, such as the 'learning-as-product' model proposed by Hager (2004) or the 'learning as acquisition' metaphor described by Sfard (1998). In the context of youth work education, this raises challenging questions regarding the development of reflexive and emerging professional identities. With these competing views on learning, which is the more valued and appreciated: youth workers' learning *for* the workplace or youth workers' learning *in* the workplace?

When a site of youth work is conceptualised within theoretical perspectives of workplace learning, youth workers' learning may occur symmetrically through work. In fact, it might be argued that the work is the learning. As Billett (2002) notes:

> if learning is seen as something privileged by practices within educational institutions, rather than as a consequence of participation in social practices more generally, such as those involved in the production of goods or services, this may inhibit understanding about learning generally and learning through work, in particular (p. 57).

With this consideration given to workplace learning and to particular work practices, including routine and non-routine activities and the nature of interactions between colleagues and clients in a site of youth work, the milieu of the youth work is given attention. This occurs rather than just dispensing generalized knowledge about youth work. The setting and environment of the youth work is as equally valuable and important as the knowledge and skills that the educational training providers are seeking to translate into the workplace. By privileging the contexts youth workers are embedded within, new ways of understanding the curriculum of the youth work education program may be enabled.

The traditional notion of curriculum is that it consists of planned 'subject-matter' responsible for shaping a particular time and space for learning that is primarily driven by the educator. In the workplace, Moore (2004) articulates that an alternative position emphasising a situated curriculum, or 'curriculum of experience', should be taken. Moore summarises that, 'thinking about curriculum as a feature of workplace learning means thinking about the way people involved in a particular situation construct a more or less shared conception of knowledge through which they organise their interactions and activities' (p. 331). It is an educative stance that values the lived contexts and experiences which shape how youth workers give meaning to their work, and acknowledges how these meanings structure their actions and intentions in sites of youth work.

This provides a platform to commence a formalised approach to the education, training and professional development of youth workers through further constructing and building upon youth workers' 'nested knowledge' (Lyons 1990).

Clustering youth workers: creating learning communities

The funding body for which I was working identified three geographical regions in South Australia in which to target potential youth workers for participating in this training program. In each identified region there are differing communities, with some up to several hours away from each other. Also, in each regional centre there are multiple youth service providers whose participation was desired. Out of the expressed interests of the funding body came several factors heavily influencing how an effective workforce development and training program might be constructed and implemented. These factors contributed to the development of learning clusters.

Learning clusters emphasise the innovation, inspiration and actions necessary for creating strong relational networks for knowledge sharing amongst youth workers in each region. Through learning clusters, youth workers come together to merge ideas and theories into actions. By participating in forms of action-based learning and experiential-based learning, youth workers engage in more cooperative and collaborative forms of learning and inquiry. This leads to an emphasis on the social and relational dimensions of learning and perception-making. Through collaborative endeavours emerges a sense of a professional identity connecting youth workers to a larger community of peers.

The need to bring participants from differing locations within each region grew out of the reality that individual workshops in each site of youth work could not be sustained. The fiscal resources were not

available. Establishing workshops in a single location within each region was more feasible.

More importantly, there are significant theoretical considerations in establishing learning clusters. Firstly, youth workers from differing communities and sites of youth work in each region bring varying biographies and dispositions to their youth work (Dominice 2000, Hodkinson, Hodkinson, Evans, Kersh, Fuller, Unwin & Senker 2004). This creates a diverse learning group, in effect, formally establishing a 'community of practice' (Lave & Wenger 1991, Brown and Duguid 1991) for peer learning to occur through social interaction, engagement and reflection on situated youth work practices. This view of learning is identified as 'legitimate peripheral learning' (Lave & Wenger 1991) where new or novice youth workers develop skills and knowledge through direct participation within a community of more experienced practitioners (a youth work team) and a site of work and learning (a youth centre). Through their participation and experience, youth workers develop skills, knowledge and a growing sense of professional belonging and vocational identity. The accumulative effect of this participation and socially situated learning leads to their movement from the periphery to a more centralised position within a community of youth work practitioners.

This situated view of learning is fundamentally different to mainstream understandings of learning. Rather than seeing learning consisting of an individual's acquisition of objective, de-contextualised knowledge disembodied from a context, this view understands learning to be anchored within particular settings. Situated learning theory (Lave & Wenger 1991, Brown & Duguid 1991) proposes learning to be a socially mediated activity, where knowledge is constructed within the work practices and workplace contexts that particular communities of youth work practitioners are located within.

Designing the training program: methodological elements

From these three regional learning clusters, an educational methodology evolved giving shape to the training program. Although the curriculum content of the training program – the '*what*' – is equally important to the discussion of pedagogies or the specific principles that adult educators utilise in shaping learning relationships – the '*how*' – due to space constraints this aspect of the training program is not explored further here. Rather, a focus is placed on the methodological elements structured in addressing youth worker training, with special attention to learning within the workplace. The first element of this training program involves the incorporation of structured workshops. The second element consists of work-based learning projects. The third element incorporates integrated community events. And the fourth element involves individual assessment interviews. None of these elements stands alone; they build upon each other. There is no necessary sequential order between these methodological elements; however, it is the whole, integral nature of these four elements that contributes to securing the successful completion of youth workers' participation within this competency-based training program.

Structured workshops

Structured workshops are developed to address the core and elective competencies comprising the youth work qualifications in which participants are enrolled. In delivering a youth work curriculum that covers the necessary theoretical dimensions and competencies these youth work qualifications require, the workshops are designed to function as the main thread around which other methodological elements are woven. However, the workshops are also designed to foster an emergent and negotiated curriculum (Brew & Barrie 1999), to develop the 'discursive resources' (Potter 1998) enabling further participation within the training program and the workplace, and to strengthen dimensions of 'relational trust' (Bryk & Schneider 2003) amongst youth workers within each region.

A significant component in structuring the workshops is the role of consultation with participants. In order to identify key areas of skills development, and ensure the relevance of the training program, youth workers are actively involved in shaping the training program. Consequently, full consideration is given to the workplace and community contexts within which these youth workers are situated. While keeping negotiation within a well defined structure shaped by the required competency frameworks, this co-construction of the youth work curriculum creates greater involvement, motivational investment and a sense of ownership in the learning for participants.

From these workshops, participants enhance their use of youth work theories and practices through constructing the discursive resources – or the texts, words, metaphors, and vocabularies workers utilise in articulating, naming and refining their youth work practices. Developing youth workers' discursive resources is pivotal in deepening their knowledge and ability to participate in workplace dialogue and peer learning opportunities.

In researching the nature of organisational change within school systems, Bryk and Schneider (2003) demonstrate the significance of the need for 'relational trust' in fostering change. They note that a lack of 'relational trust' for participants will create significant barriers to such change processes. This notion of 'relational trust' is as important within each learning cluster as the ultimate outcomes of the training program: skills, competence development, an increase in the shared professional identities of youth workers within each region, and an increase in the dimensions of collaboration and cooperation. For such processes to take place, a change in work practices is required. 'Relational trust' does not occur quickly. Its aspects of respect, personal regard, competence in core responsibilities and personal integrity are vital experiences for youth workers in everyday interactions within the workplace (Bryk & Schneider 2003: 42–43). The structured workshops facilitate opportunities for these aspects of 'relational trust' to be experienced.

Work-based learning projects

In drawing upon the aspects of an emergent and negotiated curriculum, youth workers' discursive resources and the notion of relational trust, work-based learning projects are developed and implemented to involve small teams of youth workers in addressing problem-based learning and inquiry-driven processes (Dewey 1997) specific to each site of youth work. These projects range from developing consultative strategies for projects involving young people, to promoting youth participation within local media, and developing and implementing projects to address young peoples' concerns, issues and interests. Attending to these work-based projects requires work in small teams, thus fostering collaboration and team-building in youth centres, and also between and across the participating sites of youth work within each learning cluster. These specific learning projects arise from the structured workshops, participants' voices, educators' observations of skills gaps, and the need to refine and further strengthen youth workers' work practices in addressing the required competencies.

Not only do the work-based learning projects serve to further 'stretch' and translate learnings from structured workshops into workplaces, they also function as mechanisms in which participants generate 'evidence' of their work. This can be used in assessments for verification and confirmation of the required competence and skill levels required for youth workers to gain formal recognition. As Golby and Appleby (1995) discuss, '[t]he use of a critical professional community is widely seen as a vehicle for professional development … change may be more easily effected when support from a sympathetic group is at hand' (p. 150). Work-based learning projects promote the development of a critical professional community of youth workers who are engaged in the action, reflection and revision of the situated work practices that support the young people with whom they work.

Integrated community events

As Sercombe (2004) notes, youth work can be considered a profession 'in itself', but not yet a profession 'for itself' (p. 23). Given the complexity across the landscapes of youth work with a variety of work practices and ideologies shaping views on youth work and the non-uniformity of youth work organisations and structures, one singular professional identity of youth work is difficult to establish. On a micro-level, integrated community events are one way to further contribute to professional youth work identities that are 'for themselves'.

Participating youth workers from each regional cluster are invited to participate in a three-day Youth Work Summit. This Summit is a residential-based event centred on developing skills and exploring work practices the youth workers are utilising within their own sites of youth work. In bringing all participants together, a professional community is established to further youth workers' opportunities for peer learning (Boud 1999). As Boud and Walker (1998) demonstrate, peer learning doesn't just occur, rather, much work is involved in building the capacity for such interactions to take place. Given the previous methodological elements, youth workers have had the opportunities to build their discursive resources in order to discuss and articulate their work with others. Experiential learning opportunities from work-based learning projects afford the ability to consider and reflect with peers. Youth workers also need to prepare to engage and collaborate in small teams, and this provides an environment to build the relational trust amongst youth workers within each regional learning cluster. In bringing together youth workers, their confidence to reflect critically on their work with colleagues and peers is enabled.

The Youth Work Summit promotes a sense of shared connection for youth workers. An intended outcome of merging youth work practitioners from across regional South Australia is to provide

an opportunity to experience and cultivate a sense of professional identity amongst one another. This contributes toward building a sense of belonging and connection with other youth workers, when often such a sense of connection and purpose is diminished through the lack of recognition by other working professionals. In contributing to this sense of professional youth work identity, emphasis is placed on strengthening youth workers' 'agentic action' (Billett & Pavlova 2005). This involves engaging youth workers in inquiring into their own subjectivities as youth workers as they present and share their current work and programs with each other, while also providing opportunities for contrast – where youth workers can evaluate their own work practices with those of fellow practitioners. In collaborating, reflecting and working with their peers from across South Australia, youth workers build a stronger sense of purpose in their vocation and establish more robust identities in their profession. Youth workers overcome aspects of isolation and find a sense of belonging and vocational identity amongst a larger community of youth work practitioners, who share common goals and aspirations for their youth work. Through this, youth workers experience and participate within a community of youth workers *in* and *for* the profession of youth work.

Individual assessment interviews

An attention to the personalisation of learning (Järvelä 2006) occurs for each youth worker. This assists in ensuring their successful completion in required learning tasks and assessment processes, and serves as an opportunity for the personal acknowledgement of each youth worker's development and growth through the training program. This role creates an 'outsider witness' (White 1995) process for the adult educator in acknowledging and recognising youth workers' skills development and their emerging vocational narratives. Aspects of their identity construction is noticed and framed by the educator and fed back to the learner. Through this, opportunities are

provided for the youth worker to experiment in shaping new identities about their selves as learners and youth workers (Wojecki 2005).

In these assessment interviews, youth workers draw upon their previous experiences and learnings from other methodological elements within this training program. These personal experiences and knowledge, nested within their own working contexts, provide opportunities to discuss and critique their youth work practices within their assessment interviews. Through this exploration, participants 'thicken' their stories and narratives of their youth work; in a sense, 'telling' and 're-telling' (Myerhoff 1982) their biographies and development of youth work practices. This provides opportunities for youth workers to 're-author' (White 1995) how their professional identities as youth workers are expanding through their participation in training and professional development.

Emerging professional identities in youth work

Considering a professional identity in youth work, Bessant (2004) notes, '[i]n thinking about the future of youth work, it is useful to acknowledge that what is likely to happen is not something that comes about – or something that is shaped by external forces' (p. 22). Youth work practitioners, policymakers and educators all have agency and a responsibility in shaping the convergence of youth work theories (declarative knowledge) and organisational processes (procedural knowledge) for youth workers. Consequently, a youth work 'praxis' (Freire 1970) and 'youth partnership accountability framework' (Stacy 2001) that is responsive and attuned to youth workers' values and belief systems (dispositional knowledge) may be developed. These three realms of a youth worker's 'professional knowledge landscape' (Connelly & Clandinin 1995) contribute to sustaining emergent professional youth work identities.

In this paper, through the perspective of a youth work educator, the notion of 'how' vibrant professional identities in youth work might

emerge are explored through the educational methodologies used within a specific VET youth work training program. It is emphasised that attention to workplace learning and situated learning theories might offer pathways to further increase aspects of professional identity through the educational approaches taken.

Conclusion

In the Australian context, there is yet to be a professional body of youth work (Maunders, 1999), identifying the required levels of education for qualification. However, there is ongoing scholarship and debate on what the contributions of such a professional body might offer (Bessant 2004a, 2004b, 2005, Sercombe 2004, YACVIC 2004). Without a professional body anchoring required qualifications for licensing the practice of youth work in Australia, various routes to participating and engaging in youth work training and professional development have emerged. There are not only pathways through higher education, with specific degrees designed in the disciplines of youth studies and youth work (Bowie 2005, Corney 2004a), but also there are competency-based training pathways within the VET sector, as established under the Australian National Training Authority (Bowie 2004).

As the discussion on professional youth work identities continues, it is important to recognise that a central theme emerges: the education, training and development of youth workers. This paper contributes to the conversation of professional youth work identities, by inviting discussion on the design of relevant educational methodologies and approaches for engaging Australian youth workers through competency-based training programs. Often when youth work education is discussed, the emphasis is on '*what*' the youth work curricula should consist of – the required theoretical knowledge, values, skills and attributes linked to desired qualifications. These required competencies are all embodied in VET through the

development of compulsory and elective competencies. The focus in this paper, however, is on '*how*' a VET youth work curriculum might be envisioned and delivered – the particular educational strategies, intentions and actions taken to engage youth workers in a meaningful, relevant and situated learning program which prepares them to be competent, well-versed and effective within their own individual sites of youth work. This view is made possible by drawing upon theories of workplace learning, and how these perspectives help to understand that sites of youth work are sites of learning. From this standpoint, youth work education is conceptualised to strengthen youth workers' sense of connection, belonging and vocational identity within a community of youth work practitioners.

In shifting the focus from the '*what*' to the '*how*' of youth work education, a particular training and development program for South Australian youth workers has been explored. In shifting to '*how*' youth work education might occur, policymakers, practitioners and adult educators alike share common end goals: a vibrant workforce of 'articulate practitioners' (Phelan 2005) who understand their youth work practices to be a 'craft' (Eiskovits & Beker 1983) that can be used for engaging with young people, and contributing to their personal development and fulfilment as healthy and active citizens within their communities, and larger society as a whole.

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Implementing an holistic approach in vocational education and training

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Although the phrase 'holistic approach' is increasingly used in reference to vocational education and training (VET) in Australia, there appears to be a paucity of literature which extensively conceptualises or details its practical application. Existing references to an 'holistic approach' appear indicative of an integrated model seen as a vehicle for the achievement of a broad range of vocational and social capital outcomes, particularly in Indigenous contexts. This paper suggests that the theoretical framework for an holistic approach to VET is humanism and constructivist theory and that an 'holistic approach' is essentially relevant training which is contextualised and purposely tailored to the learner or community needs and goals. The paper also provides a practical schema for implementing an holistic approach in VET, which is seen as synonymous with the thematic, integrated and whole approaches to learning and curriculum development implemented in schools.

Introduction

The phrase 'holistic approach' appears to be increasingly used in relation to vocational education and training (VET) in Australia, particularly in reference to Indigenous training. However, there seems to be a paucity of research which describes exactly what is meant by an 'holistic approach' to vocational training or details what such a delivery model might look like. The most frequent conception of an holistic approach to vocational training appears to be that of an integrated model which positively impacts on learning and results in a range of more qualitative outcomes.

Some recent references to an 'holistic approach' to VET range from the 'increasing need for a holistic, whole-of-person approach to training rather than discrete packages and modules'(Allison, Gorringe & Lacey 2006:6) to the need to provide a 'holistic approach to the student in [Indigenous] training through addressing social contextual issues and not just learning outcomes' (Anderson 2006:4). Further, O'Callaghan (2005:13) found that 'Indigenous people want a focus on the holistic outcomes from VET' whereby important outcomes referred to included more qualitative constructs such as self-esteem, confidence and a sense of achievement. The National Centre for Vocational Education Research found that training helped 91% of Indigenous students to improve their confidence and/or feel better about themselves and 71% to get more involved with their community (NCVER 2004:1).

In an 'holistic approach', vocational education may therefore be seen as a vehicle for the achievement of a broad range of goals, while government goals of vocational education may be primarily economic, driven by industry (through Training Packages) and skills focused. The idea that education should be 'locally relevant' (UNESCO 2005) appears integral to an holistic approach to vocational training. The suggestion that learning should have relevance appears to be of prime importance to Indigenous learners, as exemplified by one learner's

comment that training should have 'absolute practical relevance to work people are interested in doing' (NCVER 2004:3). The frequency of references to 'holistic approaches' in vocational research in Indigenous contexts may therefore reflect the desire for such relevance in training.

The desired outcomes of an 'holistic approach' to vocational training across all contexts may parallel that identified by UNESCO (2005) as 'education for sustainable development'. Some key features of education for sustainable development are that it should be 'interdisciplinary and holistic, values-driven, locally relevant… and offer learning experiences that are integrated in day-to-day personal and professional life (UNESCO 2005). In light of this, an holistic approach in vocational training can be conceptualised as an authentic approach where curriculum planning, delivery and assessment are purposely tailored to the goals and needs of the learner or community.

Theoretical framework

Given these references, the theoretical framework for an 'holistic approach' appears to be that of humanism and constructivist theory. Humanism may form the theoretical underpinning of what is intended by such references to an 'holistic approach' to vocational training. It is characterised by the concern for the growth and full development of the whole person where what is learned reflects the values and goals of the learner (Burns 1995:130–131). Humanist teachers provide a positive classroom climate and are seen as 'facilitators' who are sensitive, empathic, accepting and genuine (Burns 1995:132). In constructivist learning, students construct their own knowledge and there is a purposeful nature to designing learning activities. A bridge is built between what students already know and what they are expected to learn (Gagnon & Collay 2006:4). Similarly, Dufty and Dufty (1994:74) refer to the strategy of making 'forced

connections among topics' to reinforce relationships which may not be immediately obvious. These may be seen as key holistic strategies in reinforcing relevance to the learner in vocational contexts.

Such holistic strategies can be seen as synonymous with the thematic integrated curriculum and whole approaches to learning implemented in schools, where several subjects are tied together through a theme to enhance meaning and explore interrelationships between subjects. In vocational training the integration and contextualization of curriculum can be purposely designed to meet the needs and goals of the learner, the community, a project, enterprise or the workplace. In vocational training, such needs and goals become the 'thematic' basis for curriculum design as well as the context for literacy and numeracy use. 'Integration' of the curriculum can be achieved by explicitly reinforcing links between the training program and these goals and in interpreting Training Packages by mapping the connections between units of competency. Thematic instruction is thought to offer opportunities for students to actively engage in a constructivist approach to learning and for students to hone in on one or more of their multiple intelligences (Meyer Meinbach, Fredericks & Rothlein 2000:6).

Implementing an holistic approach in VET

Implementing an holistic approach in VET requires the purposeful development of curriculum based on three key principles of design: curriculum should be designed in response to a needs and goal analysis of the whole person/community; literacy, numeracy and any local language should be contextualised and embedded within the training program; and curriculum should be contextualised, customised and holistically mapped.

Analysing needs and goals

The success of vocational programs appears to be dependent upon relevant training which is purposely and holistically designed in relation to learner or community needs and goals. Training Packages are a set of nationally endorsed standards and qualifications for recognising and assessing people's skills in a specific industry sector. In interpreting these, curriculum is developed through 'training programs' designed by educators and made relevant through contextualisation. Training Packages themselves are not viewed as curriculum as Down (2003:1) explains: 'training packages define only the outcome and the criteria against which the outcome is recognised'. Curriculum development is described by Wiles and Bondi (2007:73) as a process which ideally facilitates an analysis of purpose, designs a program, implements a series of related activities and aids in the evaluation process. In an holistic approach, such curriculum for Indigenous communities should be devised in consultation with or by the community, be compliant with local cultural protocols and, as such, remain in the community after delivery. Clearly, the knowledge or content for such curriculum can only come from the community. Curriculum development in holistic approaches to VET is therefore a localised, purposeful and ongoing process, as shown in Table 1.

Table 1: Implementing an 'holistic approach' to curriculum development in VET

Steps	Key questions
1. Analyse both needs and goals	What vocational, community, socio-cultural or personal needs exist?
	What is the learner/community hoping to achieve from the training?
2. Conduct a relevant and equitable RPL process	What prior learning is to be recognised?
	What links will be made with prior learning?
3. Use steps 1 and 2 to plan and develop curriculum, with the community	When we map out the needs and goals against the units of competency, do they fit?
	How can we tailor the training to get the best match?
4. Customise and contextualise	Does the curriculum match the learner/community needs and goals?
	How can I localize the curriculum to make it relevant?
5. Find holistic links between all units	When we map out these links, what themes* or assessment tasks might tie the whole program together?
	How will different trainers incorporate these links?
	What overlap and repetition exists between learning outcomes?
6. 'Build a bridge' between existing knowledge and the new learning. (Gagnon & Collay 2006) as well as needs and goals	How can we reinforce the connections between these needs, goals and existing knowledge within the program?
	What delivery and assessment strategies will 'build the bridge'?
7. Evaluate the outcomes and program	Were the needs and goals of the learner/community met?
	What social capital and other qualitative outcomes resulted?

** A 'theme' may be a project, enterprise, workplace, or learner/ community goals and needs*

The 'pre-entry assessment' should be 'vocationally relevant' rather than solely based on formal literacy and numeracy assessments. In Indigenous courses, 'pre-entry assessment' should be inclusive of Indigenous skills and knowledge relevant to the vocational area.

Screening out individuals based on deficit models of formal literacy and numeracy ignores other strengths on which individuals can draw. Waterhouse and Virgona (2005:7) found that individuals achieve success in their lives despite their literacy difficulties and that people with little 'formal' literacy may have excellent skills such as creative capability. Further, multiple forms of intelligence and capability within all learners have been identified by Gardner (1983) including linguistic, logical-mathematical, musical, spatial, bodily kinaesthetic, interpersonal and intrapersonal. A pre-entry analysis of learning styles would also provide useful feedback for designing curriculum in a vocational training program.

In an holistic approach, learner needs and goals should determine the training program and links with it forged throughout delivery and assessment. Given that learning has most meaning for people when it is constructed by individuals out of their experiences (Burns 1995:133), an holistic approach requires both identifying and incorporating learner prior knowledge and experience within delivery and assessment. The needs and goals of the learner or group may be holistically linked to cultural, social and other needs and these connections should be embedded into the training design. McKenna and Fitzpatrick (2005: 69) explain that an integrated approach is based on the belief that 'adults bring knowledge and skills to learning and that it is the role of the facilitator to introduce the learner to activities which … build on their personal experience…'. A relevant assessment of recognition of prior learning (RPL) should occur, as Smith (2004:6) found that RPL can be a powerful process which assists student career planning, impacts on learner confidence and motivation and can assist in the development of learner-centred training programs tailored to match learning styles.

The purposes for student entry or community delivery should be clearly established. In an holistic approach, it should not be assumed that a 'paper qualification' is the sole desired outcome of a

training program. Identification of student goals, perceived obstacles to achievement and intended outcomes should be determined to ensure goal achievement (McGrath 1997). In community delivery, goals should be set and 'owned' by the communities themselves. Holistic relationships may also exist between personal, family and community goals and these can be seen as beneficial in building social capital. One such interpretation of the concept of 'social capital' is that of 'aspects of social organisations such as networks, shared values and trust that help facilitate co-operation and contribute to individual and social wellbeing' (Hartley & Horne 2006:9).

Literacy and numeracy issues

To ensure 'relevance', literacy and numeracy should be contextualised, based on training needs and embedded into vocational courses. Literacy has been defined as

> the integration of listening, speaking, reading, writing and critical thinking; it incorporates numeracy. It includes the cultural knowledge which enables a speaker, writer or reader to recognise and use language appropriate to different situations (ACAL 1989).

Multiple literacies can be found in various domains such as those Kral and Schwab (2003:20) labelled as work literacy, functional literacy and home literacy. In the health domain, health literacy is seen as 'a broad concept linked to the impact of poor literacy on health, general understanding of health issues, and access to information' (Hartley & Horne 2006:16). Literacy is therefore not seen as merely a set of technical skills but determined by the social and vocational context of actual literacy use.

These views of literacy appear to contrast with the teaching of literacy 'skills' in isolation, rather than through an integrated holistic approach within a social, cultural or vocational context. There has therefore been recent recognition of the need to embed literacy into vocational training so that literacy and numeracy learning is authentic. The methodology of teaming a literacy specialist with a

vocational teacher was implemented by Bates and Wiltshire (2001:1) in the Course in Applied Vocational Study Skills (CAVSS) where the purpose was to improve student completion rates by 'modelling and teaching the connections between "theoretical" literacy and numeracy skills and processes and their practical VET application' (Bates & Wiltshire 2001:1). This practice clearly enables literacy specialists to contextualise authentic tasks aligned to the underpinning literacy and numeracy skills which are either 'hidden within' or identified in Training Packages. Similarly, the Queensland government has stated it will 'work with industry organisations to ensure that employability skills, including workplace literacy and numeracy, are incorporated within all training delivery' (Queensland Government 2006: 44).

Literacy, numeracy and languages should be contextualised and embedded into vocational courses. Given that the numeracy skills and knowledge within vocational domains such as health, hospitality, trades and Indigenous land management clearly differ, numeracy should be holistically embedded into the 'vocational' context. In an holistic approach, Indigenous language use should also be actively reinforced in cultural learning tasks. Several units of competency enable students to use Indigenous languages or consult with individuals to use or learn such languages (according to community protocols, as well as for the employment of Indigenous community members as trainers and assessors).

Customisation, contextualisation and interconnections

Vocational programs should be customised, contextualised and interconnections between units of competency made explicit. While the terms 'customisation' and 'contextualisation' have distinct meanings, they appear to be used in vocational research as though they are synonymous.

Customisation is 'the process of tailoring a program to meet the specific needs of clients ... created through combining competency

standards drawn from two or more different endorsed Training Packages to create a new qualification outcome' (NTIS 2006). Customisation thus appears to relate to the selection of units of competency. However, the selection of units of competency according to Training Package qualification 'rules' may not always align neatly with learner or community needs and goals. In devising holistic training solutions, a 'paper qualification' may not be the 'prized' nor desired outcome of a training program, as units are selected to match a learner or community goals and needs, such as emergent responses to drought or cyclone management.

In tailoring a program, strategies such as the clustering of related subjects, mapping the links between units and presenting them in a matrix provide a 'bigger picture' overview. Related units of competence can be grouped together and linked assessment tasks designed to reduce repetition in training and assessment. For example, disciplines such as Indigenous science may contain inherent holistic connections between people, flora, fauna, country and cycles or seasons. To study each in isolation within separate units of competency does not enable the links between them to be explored, especially if each unit is taught by different trainers. Further, activities such as *FPINCR034A Utilise Burning for Natural and Cultural Resource Management* may have interconnected political, economic, social and spiritual dimensions for the Indigenous learner and result in more 'holistic' outcomes, rather than mere 'skills' in fire management. Such holistic relationships should therefore be identified and shape delivery and assessment.

By comparison, contextualisation is 'the addition of industry or enterprise specific information to a unit of competency to improve the standards relevance to industry' (NTIS 2006). Contextualising has been defined as an activity undertaken by a teacher to make units of competency meaningful to the learner (DEST 2005:6). It is contextualisation which appears to allow for the 'individualisation'

and 'localisation' of training material, enabling learners to see the program's relevance. Learning material can be specifically designed for individuals and communities with tasks based on the local culture and learning needs. In doing this, 'amendments to the range statement can be made to reflect local or organisational needs as long as they do not diminish the breadth or portability of the competency' (DEST 2005:9).

Given the apparent paucity of research on holistic approaches to vocational delivery, a comparison of key concepts in holistic and non-holistic approaches to curriculum development in vocational training is suggested in Table 2.

Table 2: Comparison of key concepts in holistic and non-holistic VET curriculum

Holistic	Non-holistic
Integrated/embedded and interdisciplinary	Fragmented
Networks and interconnections made explicit	Units/concepts taught in isolation
Inclusive of social capital outcomes	Focused on skills based outcomes
Learner centred and determined	'One size fits all' approach
Flexible in delivery and assessment	Rigid in delivery and assessment, authoritarian
Innovative	Standardised
Customised and contextualised curriculum reflective of learner needs and goals	General curriculum Learning hindered by jargon
Assessment tasks account for 'multiple intelligences' (Gardner 1983) and learning styles	Standardised course assessment Static curriculum
Relevant	Irrelevant pre-entry and course assessments
Authentic	Unilateral focus on 'the business of VET'

Potential impediments

Despite calls for an 'holistic approach' to vocational training, there appears to exist within the VET system possible impediments to authentic implementation. Such impediments include the need to create a greater awareness of moral rights and to address professional development, delivery and assessment issues.

Encouraging innovation and creativity

Innovation and creativity can be seen as integral to an holistic approach to vocational training. 'The generation, dissemination and application of knowledge is the driving force of economic and social development' (State Development and Innovation, Queensland 2006:4). In the VET sector, best practice training models, innovative ideas, intellectual property and teaching style can be considered to be valued assets. Training Packages themselves 'define only the outcome and the criteria against which the outcome is recognised' (Down 2003:1).Yet while universities have and enforce rules regarding plagiarism, copyright and ethical clearance in research processes, protocols pertaining to these appear less visible in the general VET sector. Moral rights are enforced under the Copyright Amendment (Moral Rights) Act 2000 and are personal rights that belong to creators (authors) in relation to their work, as distinct from the "economic rights" included in copyright (State Development and Innovation, Queensland 2006:54). Moral rights provide recognition for creators through the right of attribution, right against false attribution and right of integrity. Awareness of moral rights may prevent others (for example, those in positions of authority) from assuming custodianship by accessing the work of others and claiming credit for it, or modifying an author's work without their consent. Given increasing electronic availability, formal and informal public sector 'partnership' resource sharing agreements and the 'recycling' of contextualised curriculum in VET, a greater awareness of moral rights is clearly necessary.

Delivery and assessment issues

Regarding professional development programs for teachers, Black (2004:5) explains that there may be an imbalanced 'emphasis on business and marketing related aspects, at the expense of the classroom and pedagogy'. Within such a system, it is possible that teaching, administrative, business and managerial domains may struggle with competing interests in the VET environment. Time allocated for meaningful and relevant professional development activities, curriculum and program development may be consumed by 'the business of VET'. Further, in VET, the timeframe between initial student assessment, implementing an holistic approach to curriculum development (Table 1), resource development and actual course delivery may be inadequate.

The provision of VET trainer and assessor professional development opportunities in interpreting Training Packages may be another possible impediment to implementing an holistic approach. Whether the *TAA04 Training and Assessment Training Package* adequately prepares trainers and assessors to apply an holistic approach or truly embed literacy and numeracy into vocational delivery does not appear to have been measured. McKenna and Fitzpatrick (2005:6) found that 'the extent to which language, literacy and numeracy is delivered successfully in an integrated approach is dependent on the ability of facilitators and assessors to interpret vocational training packages and to develop appropriate teaching and learning strategies'. In a holistic framework, it may be that primary school trained teachers can transfer useful practices to vocational training such as the interdisciplinary 'across the curriculum', thematic and 'whole language' approaches utilised in schools. Further, the degree to which holistic interconnections are made in vocational training may be reflective of the use of different trainers and assessors for different units (the fragmented approach) and the 'co-ordination' of delivery.

There also appears to be a paucity of research into the role of online learning in 'holistic approaches' to VET. Whether online curriculum is continually contextualised and how the desirable personable qualities of sensitive, empathic, accepting and genuine facilitators (Burns 1995:132) might be expressed, does not appear to be measured. However, in the public sector, trainers and assessors may be generally employed on the basis of their knowledge of the particular organisation and VET system, rather than on humanist principles. In general, selection and recruitment of teachers in the VET public sector appears to be primarily based on addressing generic selection criteria which requires an understanding of 'the organisation' and 'the VET system' rather than on values, expectations and 'examples showing how ideas have been transferred into teaching practice' (McGrath 1998:25).

There may be other potential administrative impediments in the VET system. If training is to be relevant, then RPL needs to be authentically implemented. Yet 'there is no clear agreement among writers, researchers and major policy-influencing agencies regarding what RPL is, does or encompasses, while the associated administrative costs' may be disincentives to implementation (Smith 2004:5). Similarly, poor pedagogical practices can be seen in the text, format and lengthy wording of course brochures and learner resources for students with minimal formal literacy, where the abstract language of Training Packages and other jargon has been unnecessarily replicated. It is possible that, in some cases, a misconceived approach to Australian Qualifications Framework compliance and administrative marketing concerns may preside over good teaching practice.

Conclusion

An holistic approach to vocational training in Australia can be conceptualised as an authentic approach where curriculum planning,

delivery and assessment are purposely tailored to the goals and needs of the learner or community. Relevance can be best achieved by embedding appropriate literacy and numeracy within contextualised assessment tasks and reinforcing the connections with the learner or community needs and goals. In holistic approaches, a bridge should be built between what students already know and what they are expected to learn (Gagnon & Collay 2006:4) and 'forced connections among topics' made to reinforce relationships which may not be immediately obvious (Dufty & Dufty 1994:74). These may be seen as key holistic strategies, as seen in thematic approaches to school curriculum planning where several subjects are tied together through a theme. While innovation and creativity appear integral to an holistic approach, a lack of awareness and enforcement of moral intellectual property rights and a unilateral focus on the 'business of VET' may be impediments to the long-term retention of talented staff and the expression of innovation in the VET sector.

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Teaching for social capital outcomes: The case of adult literacy and numeracy courses

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There is strong evidence that participation in education and training can produce social capital outcomes. There is also strong evidence that such outcomes are useful outcomes; they can enhance the development of other outcomes often called human capital and they can contribute to the social-economic wellbeing of the learners and the communities in which they live. Yet, little research has been done on the pedagogy and other conditions that produce social capital outcomes in education and training. This paper reports on a research project that investigated what teachers do to produce social capital outcomes in adult literacy and numeracy courses.

Introduction

There is a growing body of research which indicates that learning outcomes are a function of the social capital students bring to the program or course and that, furthermore, learning can produce additional social capital outcomes for students (for example, Coleman 1988, Field 2005, Schuller, Preston, Hammond, Brassett-Grundy & Bynner 2004). Social capital refers to the norms, networks and trust which Putnam (1995) identifies as the 'features of social life ... that enable participants to act together more effectively to pursue shared objectives'. Portes (1998) observes that, '[w]hereas economic capital is in people's bank accounts and human capital is inside their heads, social capital inheres in the structure of their relationships'. Because social capital is comparatively intangible, its definition, let alone ways in which it can be measured, remains debatable. For pragmatic reasons, the study reported in this paper adopted the Australian Bureau of Statistics (ABS) definition which describes social capital as the 'networks, together with shared norms, values and understandings which facilitate cooperation within or amongst groups' (2004: 5).

Despite the ongoing difficulties of definition and measurement, the relationship between social capital and learning has captured the interest of both research and government. Much of the research relating education and social capital has been conducted in the schooling sector (e.g. Dika & Singh 2002). There is also an increasing body of literature that is exploring the relationship between social capital and adult learning (e.g. Allison, Gorringe & Lacey 2006, Balatti & Falk 2002, Falk 2006, Falk, Golding & Balatti 2000, Field & Spence 2000, Kearns 2004, Kilpatrick 2002). In the area of adult literacy, such research is limited but growing (Balatti, Black & Falk 2006, Falk 2001a, Tett, Hall. MacLachlan, Thorpe, Edwards & Garside 2006).

Because there is sufficient evidence to suggest that adult education programs, including adult literacy and numeracy courses, can produce social capital outcomes, it is worthwhile investigating the pedagogical practices that generate them. The assumption being made here, of course, is that pedagogy does have an impact on the social capital outcomes that students experience. This is not to imply that pedagogy is the only factor that impacts on the production of social capital outcomes. Curriculum, context, funding, and the resources and needs that the students themselves bring to the course, are just some of the factors that are likely to impact on the social capital outcomes experienced. Nevertheless, pedagogy is certainly an important factor to investigate if only for the reason that to some extent it is within the realm of the teacher's influence to modify or develop.

This paper is about identifying some of the ways in which teachers draw on the social capital that participants bring to stand alone adult literacy classes and some of the ways in which they go about providing the learning environment that fosters the development of social capital outcomes. The term 'pedagogy', however, is not unproblematic. It can be defined so narrowly as to include only a technicist description of what teachers do when teaching or so broadly as to also encompass elements of education and training that impact on what teachers actually do (Hammond & Wickert 1993). In the research project reported in this paper, the term refers to what teachers do with their students in delivering literacy education.

The study

The research reported here comes from a study (Balatti, Black & Falk 2006) that investigated the nature and usefulness of social capital outcomes of stand alone literacy courses (Black, Balatti & Falk 2006) and that also attempted to identify at least some of the pedagogical practices that supported the development of social capital outcomes. Here the discussion is limited to the pedagogy.

The concept of social capital was operationalised as a set of 12 indicators (Balatti, Black & Falk 2006) based on the ABS social capital framework (Australian Bureau of Statistics 2004). The indicators looked for change in the participants' interaction with new or existing networks. For example, participation may have led to change in trust levels, change in the number of networks that the learner accessed or change in the way that the participant sought support from or gave support to other people.

A point of clarification requiring immediate attention concerns the ownership of the social capital. Social capital can be viewed as a private good (Coleman 1988), that is, an asset owned by individuals, and it can also be considered a public good (Bourdieu 1986), that is, owned by a group and beneficial to members of that group. Consistent with Coleman's position, this study is based on the premise that social capital outcomes can be identified as a private good, that is, social capital outcomes, if they exist, are experienced by the individual learners in literacy courses.

The data for the qualitative study were a set of 75 interviews with 18 teaching staff and 57 of their students in three locations, Darwin, Townsville and Sydney.

Data relevant to pedagogy were mainly produced by the teacher interviews. The kinds of questions that elicited information about pedagogy included:

- How do you decide what to teach and how?
- What do you think students get out of this course?
- What is it that you do that produces these sorts of outcomes?
- What sort of strategies seem to work better than others?

Most teachers in their responses did not refer to the term 'social capital' although many did refer to aspects of social capital (for instance, networks, trust, links) without actually using the term. The link between pedagogy and social capital outcomes, therefore, was sometimes explicitly made by the teachers and sometimes it

was inferred by the researchers. Inferences were made when the data comprised a description of what the teacher did in a teaching/learning episode that resulted in a learning experience producing outcomes that were evidence of one or more of the 12 predetermined indicators.

Findings

The data reported here summarise what it is that teachers do when teaching their students that seems to be directly related to the production of social capital outcomes. The pedagogical strategies and techniques are clustered around the contexts in which they have the primary impact. The contexts are described here in terms of the three types of networks that students become members of by virtue of joining a class (see Figure 1). The first network is the formal network of staff and students that operates in the classroom at designated times over a period of weeks. The second type of network that students enter is the teacher-based networks that may operate both inside and outside the formal course time. The third set of networks is the informal networks that students make with other students and that operate outside formal class time.

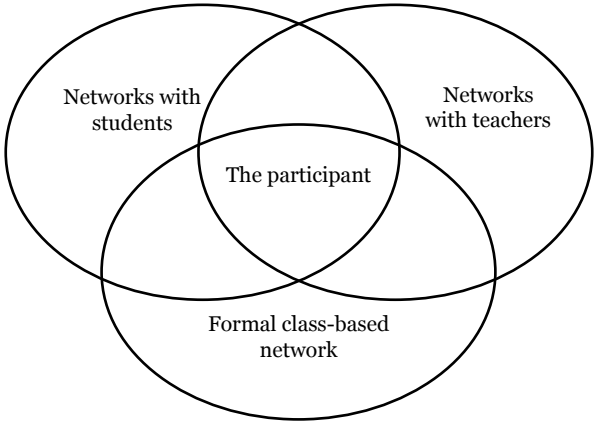

Figure 1: Participant membership of course-related networks

Formal network

Possibly the most visible, and certainly most formal, new network that the participant enters comprises the teacher(s) and the students in the classroom. It is in this network particularly that teachers are important. The principles of adult basic education teaching are well documented (Lee & Wickert 1995, Scheeres, Gonczi, Hager & Morley-Warner 1993), as are adult basic education practices (Herrington & Kendall 2005, McGuirk 2001). While these principles could be discussed in terms of how teachers operationalise them to produce social capital outcomes, this paper will not do so. Rather, attention is drawn to two aspects of the classroom network (important in adult education pedagogy) that appear significant in understanding how social capital outcomes are generated. These are the norms that operate in the group and the nature of student membership in this 'whole of class' network.

Network norms

Being an active and productive member of the class is integral to adult literacy and numeracy courses, regardless of whether the focus is writing, reading or speaking. Discussions led by teachers or students, buddying, peer tutoring, mentoring, pair work or small group work are just some of the ways that group work forms part of the modus operandi. Consequently, teachers and students alike conform to a set of norms that produce a social-emotional environment in which tolerance and good manners prevail; in which new students are welcomed; where students feel safe to take risks and share; where people listen patiently when others talk; and where being non-judgemental is paramount. Non-compliance, if persistent, is ultimately challenged.

Participant membership in the network

Student membership in the adult literacy and numeracy group is defined within the constraints of the norms described above.

Providing that students do not infringe on the rights of others, they are welcomed as full members of the group.

Students are invited to nominate topics of interest, to bring into the classroom setting their histories, their interests and their aspirations. A feature of the student membership remarked upon by students and teachers alike was agency. Students have some control over what transpires in their time together as a group and have complete control over the pace at which they wish to learn. In other words, in this network, students have full membership by simply being themselves.

A story of the student-turned dancer illustrates the way in which this kind of membership can produce a chain of events replete with social capital outcomes for the student and for fellow students. A newspaper article discussed in class on the health benefits of dance caught the interest of a student originally from Hong Kong. After that discussion and unbeknown to his class, he started attending classes in modern dance with four different groups in the city, four nights a week. Several months later, in a class discussion on hobbies, he let his class know of his interest and provided a demonstration. This led to a group excursion by train to one of the dance venues for a lesson. Two other students took up dancing classes as a consequence.

The norms established and the nature of the student membership resulted in students reporting that they felt safe amongst the other students in the course. This allowed them to be open about who they were, including being open about their language and literacy skills.

Networks with teachers

The significance of the student-teacher relationship in many of the interviews warranted the need to identify the teacher networks that students access as being very important in producing social capital outcomes. Relationships between students and staff were built in the public forum through interaction in the classroom and on outings

to locations as varied as museums, wildlife parks, legal courts, restaurants and even dance venues, but also, more privately, through personal conversations and through letter-writing.

For a number of students, the relationships they had with their teachers were perhaps the most significant factor affecting outcomes, including social capital outcomes. It was through these relationships that many students redefined their connection with education institutions, redefined their relationships with other adults in authority positions, and even more significantly, redefined themselves as learners and sometimes even as members of society.

Two of the more important aspects of the teacher-student network discussed here are the nature of the student-teacher relationship and the role that the teacher takes in linking students to networks outside the course context.

Student-teacher relationship

When referring to how students felt teachers treated them, the most frequently expressed sentiment was 'with respect'. The contrast with remembered school experience was commented on often, as evidenced in the following comments:

> I expected it to be more like the teachers standing there and telling you what to do … I was really surprised. They're not really judgemental. It's really changed everything for me coming to this course because the teachers are really good role models for you because they tell you, 'You can do it!' and it gives you confidence. (Female, age 18)

> It's like chalk and cheese. No comparison. You get treated with respect, and your opinion is valued and everyone can make comments. (Male, age 50)

One story, in which many of the key elements typical of the teacher-student relationship in adult literacy and numeracy appear, is reproduced below. This story is from a teacher who uses letter-writing with her students of non-English speaking background as a way of embedding language in social practice.

> One student in her letter last year said to me she was wanting to bring back her mother's ashes from Hong Kong and didn't know how to go about it. But that was just in her letter; she would never have said that in class. Then I wrote back to her and I said to give me a few days and that I'd find out what to do. So I got on to the government departments and gave her the telephone numbers. Eventually, months later, in one of the letters she wrote back, she said that finally her mother's ashes were on the way out, and she could have them rest in the Buddhist temple where she went. That was a really big thing for her, but without the communication in the letters that wouldn't have happened.

A brief analysis identifies important features of the teacher-student relationship. The story reveals the authentic engagement of both teacher and student in the interaction. It also illustrates that it is the student who controls the interaction rather than the teacher. In writing about her personal problem in the letter, the student shows trust in her relationship with the teacher; when she informs the teacher of the outcome, she shows respect. The teacher follows suit by also responding in writing, accepting the appeal, explicitly or implicitly made, to assist in any way possible. To do this, the teacher needs to research an area about which she knows little. She then gives the student the contacts necessary and waits for the student to tell her the final outcome of the exercise, if and when she chooses. The story also illustrates the connections that teachers can help students make with other groups and networks outside their own personal sphere of interactions.

Teacher as connector/link to other networks

Teachers interviewed drew on their own human and social capital to connect students with their own networks and with other groups, organisations and institutions in society. The individual student

needs, aspirations and capabilities informed the advice teachers gave, and the degree of intervention applied to facilitating the links.

In some instances, teachers physically took the student to the appropriate destination. In one case, a teacher took a student to the city library and helped with the membership application process. In another, a tutor drove the student to the transport department to enable him to undertake an oral driver's licence test she had specially arranged for him. More commonly, the intervention took the form of teachers explaining how to access the necessary information, for example, phone numbers, addresses or websites of support services, volunteer organisations and government agencies. The most common of all interventions was the encouragement given to pursue particular goals or to contemplate possibilities hitherto unconsidered that led students to form new links or connections.

That some students remained in contact with their teachers well after their course participation ended suggests that the relationship can be particularly significant. One teacher spoke of an ex-student in her thirties and now employed, who visits her teachers just to 'keep in touch'. Other past students draw on the teacher-student network when the need arises. For example, an ex-student recontacted her teacher when she wanted assistance in writing a letter of complaint to the city council. A numeracy teacher told of students who have moved on to other courses, including university, but who still contact her for advice.

This study has shown that the teacher can be a very rich resource for students in a number of ways, apart from their expertise in teaching literacy courses. For many students, the teacher may be the only person they get to know well and who is educated, relatively knowledgeable in areas that are important to the student or who is a member of networks that could be useful to them. For many more, the teacher is a person of authority or of some standing who treats them with respect – this can be a new experience for students.

Networks with students

The informal networks that students make with other students present more sites for social capital production. The membership provides opportunities for new attachments and new ways of interaction.

Different classes produced different kinds of networks. Many commented on the course participation having provided them with the opportunity to meet new people and make new friends. For some, this led to socialising in their free time, including visiting one another's homes and joining clubs together.

There were some non-English speaking background classes, for example, that seemed to produce rich student networks. Information on a variety of topics relating to their everyday lives, such as health, food, customs, education and holiday destinations, was exchanged and group outings were planned. In contrast, other groups seemed to have less cohesion, but nevertheless still provided an information network for jobs, further training, services or general knowledge.

The teachers interviewed were cognisant of the importance of the student networks formed among the students. One teacher of an adult literacy and numeracy class of mainly young people who were disenchanted with the school system observed that 'if they don't form a friendship almost straight away, then they are not going to last'.

Changes over time in student networks provide evidence of social capital outcomes being realised. For example, within a class comprising students from many different ethnic backgrounds, a teacher observed that, six months after joining the course, a student originally from Hong Kong welcomed people of different cultures into his network:

> And it was a real turn around. He invited the guys from the Middle East to come and sit with him because they all sort of sit in groups and he sort of said, 'Come and sit here and we

> can discuss this together'. Big smile, very positive, open arm movements and very open body language. That was really, really encouraging to see … It's only just recently starting to occur. So he's feeling more confident within himself and more able to be more welcoming.

Such networks may seem independent of any teacher intervention but this is not the case. Interaction and trust build within the group in great measure due to teacher strategies. Opportunities in terms of space, time and motive, for example, have to be created as the starting point for these networks of informal interaction to occur.

Discussion

The findings in this study suggest that the literacy and numeracy courses that the students experienced serve two functions in social capital building. Firstly, the course-related networks serve as a 'practice field' in which students experience the conditions conducive to acquiring new identity and knowledge resources. Secondly, the students are able to bridge or make connections between the learnings from their course and the rest of their lives. The role of pedagogy is critical to both functions.

The term 'practice field' is borrowed from Schein (1993, 1995) who used it in the completely different context of organisations to describe a way of bringing about organisational change. Because the processes involved in making the transition to new ways of thinking or doing and firmly establishing them in one's repertoire take time and practice, a practice field is necessary. It is a space, literal and metaphorical, separate from the rest of the organisation in which a group of employees is able to learn new ways of doing and thinking and be free to make mistakes without fear of penalties. Schein (1993) states that individual learning, especially habit and skill learning, is best supported in a group situation where there is the psychological safety to experiment and make mistakes. This may require temporarily moving employees out of the normal everyday work structure into a learning space where new norms can become established. Such a space comprises a group of people who come together to support and learn from one another. Essential elements of a psychologically safe environment include opportunities for training and practice, and effective norms that legitimise making errors and that reward innovative thinking and experimentation. Once they're ready, the employees re-enter the mainstream of the organisation.

When the notion of 'practice field' is applied here, the practice field is the course related networks that exist within the larger 'organisation' of the participant's world. For many, the networks are a new and safe environment in which to play out new aspects of identity and practise new skills. Resources developed may include new attitudes and beliefs about self and others, new ways of interaction and new links and connections. Within these networks, social capital outcomes are experienced.

However, there is an important difference between the two contexts of the organisation and the literacy and numeracy course. Unlike the organisational setting where participants move from the practice field to the wider setting of the organisation once they are ready, literacy and numeracy students participate in both the practice field and in the rest of their world, at the same time. This allows for multiple opportunities to bridge the two sets of experiences.

The analogy of the bridge is used here to describe the second function that literacy and numeracy courses have in producing social capital. A bridge suggests a means by which there is a two-way flow. For example, in the context of roads, a bridge allows traffic to flow both ways, often simultaneously but not necessarily. In this context of learning, the two-way flow refers to the flows of identity and knowledge resources developed in the interactions in the course-related networks, and of those developed in the other networks to which the students belong. The networks external to

the course may include family, friendship groups, workplaces, faith groups and special interest groups. The 'bridges' that encourage this flow to happen are the 'bridges of confidence' that the students ultimately build. The bridges are those new interactions that learners are prepared to engage in – new because they are drawing on new resources or new because they are drawing on existing resources in new ways or contexts. It is these new interactions outside the practice field that are able to produce changes in the nature of the memberships that the students have in their networks.

The two-way flow occurs in a variety of ways. It occurs when resources such as skills or confidence generated within the relatively safe environment of the practice field are applied, deployed or transferred to new or existing networks outside the course. It occurs very obviously when contacts made in class lead to other contacts in networks that learners had not accessed previously. Just as importantly, the two-way flow also occurs when students draw on their out-of-class lives in their interaction with teachers and peers in the course.

The choice of pedagogical practices that teachers make impacts on the nature of the practice field and hence on the extent to which students risk new kinds of interaction in the networks that comprise their lives. The pedagogical practices influence the nature of the networks formed not only in providing the conditions for them to grow but also by influencing the nature of the memberships and interactions of their participants. Despite the limitations of this study especially in terms of size, it is evident that the interactions that teachers have with students are critical in having students develop the confidence and the know-how to redefine themselves in the networks in which they find themselves.

Conclusion

The teaching staff interviewed in this study employed practices that came out of a commonly held set of beliefs about what it means to teach adult literacy and numeracy. Broadly speaking, they shared a socio-cultural perspective in which the individual is the focus. Whether a social capital perspective is merely a 'dressing up' of a pedagogy that is true and tried into something that only appears new, or whether it actually does signal the need to review the desired outcomes from literacy and numeracy courses, and therefore to revisit the pedagogy, remains to be seen.

Even if it is the former, exploring the teaching/learning adult literacy and numeracy experience from a social capital perspective still offers tremendous value. It is a way of reinvigorating a set of pedagogical practices that were established 15 to 20 years ago (for example, Grant 1987, Lee & Wickert 1995, Scheeres *et al.* 1993) and that need critique in the light of the developments that have occurred in adult learning research since then. It is particularly worthwhile, at a time when many of the teachers in adult literacy and numeracy are approaching retirement, and new teachers are taking their place though in a whole new policy environment in which teaching literacy and numeracy is often fragmented into short courses and subject to the single focus of immediate job outcomes.

If, on the other hand, it is the latter, and a pedagogy designed for social capital outcomes as well as for the traditional outcomes of skills, knowledge and self-confidence is warranted, then constructing the learner as a member of networks is a start. Either way, more research, especially practitioner-led research, on pedagogical practice is needed.

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Adult learners online: students' experiences of learning online

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Throughout the world, policy-makers are demonstrating their commitment to widening participation in education by promoting alternative pathways to gaining academic qualifications. This paper reports a study which aimed to investigate the potential of online learning to overcome barriers to participating in education by socially disadvantaged adults, and to identify the factors that influenced such students' participation and successful completion of online learning courses. Seventy-nine adults taking online learning courses with the Open University in the United Kingdom participated in a telephone survey and 15 of these students were also interviewed.

Participants perceived themselves as having more easily accessed education because of the option of online learning and reported having benefited from the experience. However, online learning per se should be offered as only one potential means of attracting and retaining adult students, and further exploration into its potential for widening participation is necessary.

Introduction

An issue for consideration by governments throughout the world is the promotion, extension and deepening of educational experiences for all members of society. This includes an emphasis on lifewide as well as lifelong learning (Clark 2005). Certain current debates in education centre on making education more accessible and more relevant throughout life (DfES 2005, Houghton 2006, Social Exclusion Unit 2005) and there is also a focus on including less advantaged, or socially excluded, adults in education. In particular, governments are keen to point out the personal, individual gains adults may accrue through upskilling, retraining and returning to education with broader economic and societal benefits (Clayton 1999, McFadden 1995). With these dual paybacks in mind, adults are being encouraged to return to education and gain academic qualifications (Appleby & Bathmaker 2006, Brine 2006, Thornton 2005). Creative solutions are being sought universally to attract and retain adult students, especially those who have traditionally been marginalised within education or disenfranchised (Manheimer 2002, Wylie 2005). It is suggested more equitable educational and employment outcomes for all may be achieved through the use of digital technologies (MCEETYA 2007a), and there is debate regarding the extent to which utilising information and communications technology (ICT), e-learning or online learning is one way of overcoming barriers to participating in education by adults, (DfES 2003, Lax 2001, Looi & Lim 2006, Martin & Williamson 2002, Simpson 2005). So who are these socially excluded adults that courses delivered online are intended to attract? What is meant by 'online learning'? And how do the students stand to gain?

This paper reports some preliminary research on these issues. It is not claimed that the findings from this small-scale study can be generalised to a wider population but they do give insights into the experiences of some students of studying online. The paper considers the issues of 'social exclusion' and online learning. It charts some preliminary research conducted in the United Kingdom (UK) into the impact on adults who have not recently taken part in education of participating in online learning, and focuses on those adult students who may be considered socially excluded. What are the motivations for such adults to take part in online learning? In what ways do they gain from learning online? The paper indicates participants' views about the appeal to them of learning online again in the future. It concludes by suggesting that these participants perceived themselves to have benefited from participating in online learning, but that online learning *per se* should be offered as only one potential means of attracting and retaining adult students, and further exploration is necessary. Firstly, then, who are the socially excluded?

Background

Social exclusion

Broadly speaking, individuals are said to be socially excluded if they are unable to participate in the basic economic and social activities of the society in which they live (Chakravarty & D'Ambrosio 2002). A similar but expanded conception is put forward by Warschauer (2003): social exclusion refers to 'the extent to which individuals, families and communities are able to fully participate in society and control their own destinies, taking into account a variety of factors related to economic resources, employment, health, housing, recreation, culture, and civic engagement' (p.8). Indicators of potential social exclusion might be financial difficulties, lack of basic necessities (IT skills, employment, autonomy in work), poor housing conditions, lack of consumer durables, poor health, limited social contact or perceived dissatisfaction (Haisken-DeNew 2002).

Crucially for this discussion, other important contributory factors to social exclusion are low educational attainment and non-participation in education (Alexandiou 2002).

E-learning, or online learning

E-learning and online learning are general terms covering a wide range of approaches. They can combine different elements, such as information and communication technology (ICT), interaction, learning resources, collaborative and informal learning, formal and informal learning, and support (AISR 2006, HEFCE 2005, Mason 1998, Zhang & Perris 2004). Although they are often used interchangeably, e-learning is generally conceived of as learning that is supported and delivered through the use of ICT, and online learning is learning that is delivered and supported through the internet (Clarke 2004).

The adoption of ICT in education is being seen throughout the world as a means of effectively educating students, and orienting and preparing them for employment (Fox 2002, MCEETYA 2007b, US Department of Education 2004). Research by Matas and Allan (2004) has also indicated the benefits to adult students of using online learning portfolios to develop generic skills, transferable to the workplace. Additionally, ICT is purported to appeal across the social spectrum and age range. For example, older adults in Australia are increasingly using the internet, buying computers and engaging in ICT lessons. According to the Australian Bureau of Statistics (2006), in 2004–05, 67% of Australian households had access to a computer at home and 56% had home internet access; this compares with 54% of households in Britain having a computer and 44% of households having internet access in 2002 (latest figures from National Statistics 2006). Promoting ICT-based courses may be a way of drawing in adults who missed out on education the first time round. Further, ICT can be egalitarian, in that it is more difficult to detect status cues in electronic messages (Sproull & Kiesler, 1992) and networked activity

may decrease the perceived power of the authority figure (Blair & Monsle 2003).

As well as purportedly widening and levelling access, ICT also provides a more flexible means of delivery (Gorard *et al.* 2003, MacKeogh 2001). The appeal of online learning and e-learning for institutions and policy-makers is that it frees learners from a rigid timetable of attendance at a college or other learning institution; it enables self-paced learning and is purported to be more cost effective (Gatta 2003). From a pedagogical perspective, knowledge relating to learning theories, instructional design principles and research into student learning in higher education has been applied to the use of online learning technologies (Siragusa & Dixon 2005). The online learning environment creates an opportunity for the use of interactive and collaborative models of learning (McDonald & Reushle 2000, Segrave 2004). The varied approach gives a rich, interactive learning environment; students are able to engage more fully with course content using different media and can interact with others in a way that makes learning more effective. On a more personal level, students may find learning and interacting online less intimidating than meeting other students and tutors face-to-face. People with disabilities, especially, may welcome the anonymity and lack of prejudice electronic communication allows (Debenham 2001, Tait 2000).

The research reported in this paper builds on previous studies into social exclusion and online learning (DfES 2004, Gorard *et al.* 2000, Heemskerk *et al.* 2005, Martin & Williamson 2002, Richardson & Le Grand 2002). It has a particular focus on the subjective experiences of studying online for a group of adults demonstrating indicators associated with social exclusion, studying with the Open University in the UK.

The present study

Objectives

This study aimed to investigate the potential of online learning to overcome barriers to participating in education by potentially disadvantaged adults; and to identify the factors that influenced such students' participation and successful completion of online learning courses. Open University UK students were a focus of this research because this institution offers 'second chance' higher education. Its open entry policy attracts adults from various social and educational backgrounds who frequently do not have the qualifications necessary to gain a place at a conventional university. In addition, the Open University is at the forefront of the appropriation of new technologies for its course delivery.

Sample

The opportunity sample was comprised of 79 volunteers from a large population of students whose Open University registration form showed that they had one or more of the indicators of potential social exclusion. For the purposes of this research, the focus was on:

- adults with low previous educational qualifications (PEQs, that is, fewer than 5 GCSEs)
- younger and older students (those aged under 25 years or over 45 years)
- those from ethnic minorities
- disabled adults
- adults on low incomes.

Tables I and II provide details of the sample used in this study.

Table I: Participants' age and gender

Age	Gender		
	Male	**Female**	**Total**
Under 25 years	7	13	20
25–44 years	24	21	45
45–60 years	12	1	13
Over 60 years	1	0	1
Total	**44**	**35**	**79**

Table II: Participants' previous educational qualifications and ethnicity

Ethnicity	Previous educational qualifications								
	Below GCSE	Up to 1 GCSE	2–4 GCSEs	5+ GCSEs	1 A level	2+ A levels	HNC or similar	HND or similar	Total
Anglo-ethnic British	1	4	15	15	4	14	3	6	62
Black/Afro-Caribbean British	0	0	1	0	0	2	0	1	4
Asian	0	0	0	0	0	1	0	0	1
Other	2	0	0	1	0	0	0	2	5
Undisclosed	2	0	2	0	0	1	1	1	7
Total	**5**	**4**	**18**	**16**	**4**	**18**	**4**	**10**	**79**

Notes:
GCSE = qualification taken at end of Year 11
A level = 'Advanced level' – qualification taken at end of Year 13
HNC = Higher National Certificate – vocational / technical qualification taken post A level
HNC = Higher National Diploma – higher level HNC, equivalent to first year undergraduate level

Table I shows that more than half of the sample was aged 25–44 years; these students demonstrated other indicators associated with social exclusion (for example, having low PEQ, ethnic minority). The data in Table II indicate that the sample was overwhelmingly white British but that a third of the sample (n=27) had low PEQs.

The sample was taking a range of undergraduate level courses at the Open University (such as *You, your computer and the net* and *Understanding health and social care*) where all or nearly all the resources and teaching were delivered online. Students generally already had access to a personal computer at home or in the workplace. Some disabled students had been provided with a personal computer or specialist equipment following assessment by the Open University. The majority of participants had not studied formally for a number of years. The students were invited to take part in a telephone survey and then a follow-up face-to-face interview.

Seventy nine students volunteered to participate in the telephone survey. Of these 79, 15 (twelve men and three women) took part in the face-to-face interviews. These interviewees ranged in age from 19 years to 62 years. Only three participants in this subset had a non-white ethnic background, and five students were disabled. Seven students had up to five GCSEs or equivalent (had been educated up to Year 11), while the remaining ten students had at least one A level (attended school to Year 13).

Seven students were working full-time; the others were either retired, unable to work due to disability or were looking for a job. Only one student had applied to the Open University's Financial Assistance Fund – taken as an indicator of low income.

Participating in this study was a unique opportunity for adults to give their views about a particular learning experience.

Methodology

Based on previous research (Chisholm *et al.* 2004, DfEE 2000), an interview schedule was devised to address the research aims. A pilot study involving 11 students in telephone interviews had been conducted. The interview items related to previous experiences of conventional and online learning, level of experience and competence with computers, reasons for returning to learning at this time, future hopes and aspirations regarding learning, and the level of support students expected to receive for their studies (Sargant & Aldridge 2002). Examples of questions were:

> What made you decide to return to learning at this time?
>
> What made you decide to do an online course in particular?
>
> For how long before starting the course had you been using a personal computer?
>
> Who do you expect will give you the most encouragement to complete your course?

Linking this study to previous investigations of social exclusion (for example, DfES 2004, Gorard *et al.* 2000), participants were also asked about involvement in their local and the wider communities. For example:

> Do you have someone you could call on for help in the home if you were ill?
>
> Did you vote in the recent General Election?
>
> Do you belong to a sports, social or other club in your neighbourhood?

This pilot process led to the refinement of the initial interview schedule for the main study. The survey comprised 48 questions and generated quantitative data. The 79 students were telephoned towards the beginning of their Open University course (February/ March). These pre-test data provide baselines against which the post-test data, gathered at the end of the students' first year of study (November), will be compared.

The face-to-face interviews built on the telephone interview broad questions, and probed more deeply into the experience of learning online. A semi-structured interview approach was adopted, intending to allow participants to expand on the research issues particularly salient to them. Examples of the open-ended questions were:

> How are you finding online learning / using ICT in your learning?
>
> What do you understand now by the term 'online learning'?
>
> What is the biggest advantage for you of online learning?
>
> Have there been any drawbacks for you of online learning?

The intention was to give these students the chance to talk at greater length about the initial attraction of learning online, about related issues and in what ways they felt they had gained from this mode of learning.

Results

Why choose to learn online?

As might be expected, there was a range of motivations for these students returning to learning. Table III shows participants' reasons for studying.

Table III: Participants' reason for studying

Reason for studying	Number of participants	Percentage
Towards a specific degree	18	22.8
To increase knowledge in a particular field	17	21.5
Career change	14	17.7
Improve employment prospects	12	15.2
Towards getting a degree	7	8.9
To increase knowledge generally	6	7.6
To complete a degree	1	1.3
None of these/other	4	5.1
Total	**79**	**100.0**

The most popular reason given in the telephone interview (n=18, 23%) was to gain a specific degree, followed by students wanting to increase their knowledge in a particular field (n=17, 21%). Other than this drive for gaining a qualification, students were motivated to return to learning for economic reasons. Fourteen students (18%) thought studying might help towards a career change and twelve students (15%) considered it would improve their employment prospects.

Participants chose the Open University, rather than another institution, due to a variety of grounds, as Table IV indicates.

Table IV: Participants' reasons for choosing to study with the Open University

Reason for choosing the Open University	Number of participants	Percentage
Flexible, part-time study – fits with other commitments	36	45.6
Recommended by friends/relatives	15	19.0
Childcare/domestic responsibilities – fits in	8	10.1
Financial – could afford to pay	5	6.3
Disabled, OU seemed appropriate	1	1.3
No need for previous qualifications	1	1.3
None of these/other	13	16.5
Total	**79**	**100.0**

The Open University was the institution of choice because of the type of studying – part-time, distance learning with high quality resources and support – it offered. Thirty-six students (46%) liked the flexible, part-time mode of studying and thought it would fit in with other work and domestic commitments. A further eight students (10%) particularly mentioned the potential to dovetail Open University study with childcare or other caring responsibilities.

Understandings, choices and values

But what of the especial type of *online* studying? What were students' views on this? First of all, students were asked what they understood by the term 'online learning'. It has already been indicated that this is a phrase open to interpretation, and can encompass a broad range of approaches. Students had a varied but shallow understanding of what online learning is. Seventeen students (21%) did not have an understanding of what online learning is, and three students (4%) thought it was no different to traditional forms of learning.

However, 36 (46%) thought online learning provided a more convenient way of accessing information and people, through the use of technology. Computer conferencing was especially mentioned as a useful means of communicating with others and exchanging information. Other students (n=11, 14%) thought online learning meant learning, developing and using computing skills. Students were informed what online learning in this context meant.

When asked why they chose *online* learning, participants again gave a variety of reasons. These are shown in Table V.

Table V: Participants' reasons for choosing online learning

Reason for choosing online learning	Number of participants	Percentage
Not specifically chosen – chose subject and it came as online	45	57.0
Wanted to increase IT competency	18	22.8
Flexibility	5	6.3
Can study at home	4	5.1
None of these/other	7	8.9
Total	79	100.0

More than half of the 79 respondents in the telephone survey (n=45, 57%) stated that they had not specifically chosen to study online. Their interest was in studying a particular subject or topic. Very few had considered the different media of delivery; the course for their chosen subject 'just happened to be' delivered online. Nine respondents cited 'flexibility' and 'can study at home' as attracting them to online learning; these, however, are benefits also attributed to *distance* learning and not unique characteristics of learning *online*.

Nevertheless, given the option of studying in the traditional distance-learning way, that is, using mainly print-based rather than electronic materials, 42 students (53%) would choose to study online. Only nine students (11%) stated they would definitely prefer off-line learning, while 28 students (35%) were undecided which they might prefer.

Equally, just over half the students (n=44, 56%) placed value on online learning. Seventeen students (22%) thought learning in this way was 'very important' for achieving their goals and another 27 students (34%) thought it would be an 'important' experience. Twenty-eight students (35%) considered participating in online learning would help them 'a little' in the future.

What is doing online learning like?

Students were asked in the telephone interviews whether they had previously taken part in any online learning, and how they had got on with it. Just 16 students (20%) reported having previously taken any online learning courses. However, all these students had had positive experiences, with nine students (11%) reporting they had got on 'very well' with it.

The face-to-face interviews gave the opportunity for these issues to be probed further. Students were able to expand on their understanding of online learning, their reasons for choosing to study in this way and to reassess the value of this form of learning. Some comments from early interviews (May/June) are included here, but responses from all 15 interviewees are explored more fully elsewhere. The focus of the face-to-face interviews was more especially on how they found online learning with the Open University.

> I am pleased with myself. [I am getting on] much better than I thought.
>
> I was overwhelmed at first but now I'm getting on really well. I'm addicted to it already! I log on to the conference every evening.
>
> It's really motivating to do the activities [on the CD-Rom]. I can see what I've already covered. I'm surprised at my own organisational skills!

> It is easy and a bit more practical and more exciting than sat [sic] there just writing.

Students were able to talk in general terms about their levels of enjoyment of the course. However, they were less able to give subjective accounts of how it felt to be engaged with ICT in their learning. Perhaps this can be attributed to both the students' inexperience of the style of learning and also the novelty of reflecting upon and articulating what it *feels like* to learn in this way. As students new to higher education, to the Open University and to online learning, the task of describing the *process* of learning in this way is perhaps a tough one.

Perceived gains and benefits of learning online

Accessibility, flexibility, convenience

Students were asked what the advantages of studying online were. Students liked not having to attend college but enjoyed creating their own study space at home. In the telephone interview before they started their course, 26 students (33%) considered that the biggest advantage of studying online would be the accessibility to information and course materials. A further 26 students thought the best part of online learning was its flexibility. This was borne out in the early face-to-face interviews, after the students had had four months' experience of learning online.

> I like the flexibility, the ease of access. I like the autonomy.

> My friend is doing a course at the local college and she has these enormous textbooks to cart about. Everything here is so easy to get to.

Students appreciated the facility to access course materials and information. However, this accessibility is not so different from that afforded by the traditional print-based medium of distance learning. So what is novel with regard to accessibility about the *online* aspect?

The most appreciated aspect of online learning was its perceived potential to overcome barriers of time and space. Using ICT, students could look at or engage with the course content at a time most suitable for them.

> I can go to work and today I can have half an hour lunch break and I'll have a read at the website, that's great, that I can access it from anywhere without having to carry the book about.

For some disabled students, for whom sitting for lengthy periods in front of the computer was uncomfortable or especially tiring, this meant being able to study in short bursts and access information perhaps during the night.

> The advantages are because I am home... with it being online it is ideal because I have got all my stuff around me and with other people I have got the support as well. [The CD-Roms] are all easy and the links are so easy so there is no problem at all... Because of spells in hospital ...I missed a chunk out of the course so I am able to double back on it.

> [Studying at college] would have meant leaving my home to go over there and I didn't want to do that...this way, it all comes to me and I can get to it easily on my computer.

Aside from using the internet and CD-Roms, a unique aspect of online learning was the opportunity to 'talk' to or communicate easily with other students. The Open University (UK) uses a conferencing system called First Class, and students particularly valued this facility.

Conferencing

Students reported in the telephone interviews that being able to interact with others via the Internet was another advantage of online learning. Students welcomed the opportunities for interactive and collaborative learning with their peers.

> It's nice to get online and chat to someone about the same work.

> I've posted on the conference already and I'm pleased with the responses from the other students.
>
> Some students in the conferences are already talking about [the first assignment]. I've not yet started so that's a bit of a worry – but also an incentive to get going.

For some disabled participants, the 'facelessness' or anonymity offered by the online conferences and discussions was welcomed. As the student was unseen, there was a feeling of being accepted by others on the basis of their contributions, rather than being judged by their disability.

> It's easier to ask things, as you're not face-to-face, the personal computer is a shield.

The development of and participation in online learning communities enabled the creation of a 'student identity'. This encouraged a sense of belonging and loyalty that helped students to see their courses through to completion.

> Online conferencing makes you feel closer to the other students. I feel I am bonding with the other students already.

Students, then, felt they gained through the particular types of accessibility, flexibility and convenience offered by learning online. The facility to participate in online conferences and discussions enabled students to feel less isolated and more part of the learning community. Through online collaboration and interaction they were able to develop a sense of identity as a learner, and to participate in and receive support from their peers and tutor. This ability to interact with others in online learning is a fundamental element promoting successful study, which is often missing from more traditional forms of distance learning.

Discussion

It should be borne in mind that social class and race are important variables affecting participation in education; it is not merely access to technology that has an impact. Despite the respondents in this study being a self-selected, opportunity sample who had already overcome the hurdles in order to return to education, the comments and feedback provide some insights into the potential of online learning to extend learning across the social spectrum.

Although participants' primary reasons for choosing their course had not been the online mode of delivery *per se*, all acknowledged both the importance of developing and using ICT skills and the advantages of learning in the rich, multi-media environment provided by online learning (Peng *et al.* 2006). Learning online transcended geographical, physical, visual and temporal barriers to accessing education, and reduced socio-physical discrimination (Debenham 2001). The students in this research recognised that the online delivery of courses had enabled them to access education more easily and flexibly than traditional, print-based, distance learning courses. This supports the long-identified benefit of the multi-media approach within online learning (Palmer 1995). Participants' reports of involvement in the online conferences and discussions substantiate McDonald and Reushle's (2000) view regarding the interactive and collaborative learning opportunities afforded by online learning. Indications were that taking part in online learning had enhanced participants' academic performance, identity as a learner and possibly their economic potential.

Even the limited experience of online learning observed in this preliminary investigation appears to have empowered these participants in some way. In many cases, embarking on online learning seems to have reduced students' sense of isolation, partly through their participation in online conferences but also through a feeling of inclusion and involvement with the wider Open University

undergraduate community. Increased general self-assurance engendered by their achievements within an ICT-rich milieu appears to be enabling students to play a greater part in their learning communities, and this may lead to greater confidence to participate in wider communities. This might have a knock-on effect, helping to diminish social exclusion. However, the difficulty in teasing out the potential of *online* learning from that of *learning* in general needs to be acknowledged, and it may be that it was from the latter that participants derived benefit.

Nonetheless, many students reported that their positive experiences of learning had undone previous negative experiences of education. However, students were pragmatic and strategic in their choices, prioritising the content or subject of their next course over the medium of delivery. A course was chosen because it offered the most direct route to achieving their goal, not because it involved online learning per se. Increasingly, however, potential students are not given a choice regarding the medium of course delivery. As the market-driven educational context intensifies, using technology in learning is not an option. Indeed, it is now a specification of all Open University courses that students have access to computing facilities.

Students come to the Open University and to online learning with a variety of experiences, expertise and expectations, both of higher education and of ICT. Clearly, these factors impact on their approach, enjoyment and achievements in a novel learning environment. Online learning is promoted as being at the cutting edge of education, and the development and use of ICT skills are held up as crucial for economic and employment advancement. Despite this emphasis on ICT, students remain driven to return to learning by a thirst for knowledge on a particular topic, rather than by a curiosity to experience a different way of learning. The appeal of online learning for these participants remained more the acquisition of knowledge than the development of ICT skills. Generally, these participants

could see benefit from taking their course, and learning online, in terms of both personal and academic gain. Students appreciated the flexibility and convenience of being able to access course content using a variety of media, at times that suited them individually, and the contact with other students that the Internet gave them.

Conclusion

Students displaying one or more of the variables that are associated with social exclusion were asked in a telephone survey and in face-to-face interviews about their experiences with and the benefits of online learning with the Open University (UK). This paper has reported responses to the telephone survey and included comments from the earlier face-to-face interviews. The respondents provided a snapshot of how online learning may help overcome some barriers to accessing education. These students reported gains in terms of both personal and academic achievement and satisfaction through engaging with learning using ICT. However, institutions need to remember who it is they are providing courses for and what it is that motivates adults to return to education. Online learning is signposted as one way towards achieving personal, academic or economic goals, but it must be borne in mind that a large percentage of households – in Australia 44% (ABS 2006) and in Britain 56% (National Statistics 2006) – do not have internet access and online courses may be presenting a barrier of a different kind to would-be learners (Gorard & Selywn 2003, Selwyn 2003, Warschauer 2003). Further exploration is needed of students' motivations, aspirations and experiences in relation to online learning, so that provision and support can be more appropriately tailored to their needs, and the potential of this means of course delivery can be further exploited for all concerned.

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Tackling the issues and challenges of using video data in adult literacy research

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Although video has long been used as a teaching aid in adult literacy and basic education, literacy researchers seem to have ignored the potential benefits of using video as a tool that could add rigour to research. Reporting on their field experiences of an adult literacy learning study in Canada, the authors provide a narrative account of their use of video as a data collection tool. The article describes the methodological challenges associated with the use of video data and the procedures that were used to analyse video records in their adult literacy research.

Despite the potential benefits of video as a data collection tool and the increasing popularity of video data in many branches of social sciences, adult literacy researchers seem to have overlooked using video as an effective tool to enhance their research. As a case in point, a focused search conducted by the authors in major North American journals in adult literacy and basic education from 2000 to 2006 for studies that used video as a methodological tool resulted in only one study (Mellard & Scanlon 2006) relying on video as a data collection tool in an investigation of a strategic instructional model in adult basic education classrooms. Prompted by this under-utilisation, in this article we discuss the enhancing effects of video data and consider the key issues and challenges associated with the use of video in empirical research. Drawing on an adult literacy case study that we conducted in Ontario, Canada, in 2005 in which whole class sessions were video-taped, we then discuss the important issue of analysis of video data by drawing on the specific procedures that were developed to analyse the data.

Using video as a data collection tool

The use of video as a data collection tool in the social sciences dates back to the sixties and seventies (Berliner 1969, Gottdiener 1979, Heider 1976). However, it was only in the early 1980s when the technology became more easily accessible that video started to become an important tool in the toolbox of many social science researchers (for example, Albrecht 1985, Corsaro 1982, Grimshaw 1982, Martin & Martin 1984, Weimann 1981). Increasingly social scientists of different stripes have been relying on audio-visual data to enhance data collection and analysis (Blum-Kulka 1997, Dufon 2002, Feak & Salehzadeh 2001, Leinhardt & McCormick1996, Lomax & Casey 1998, MacDougall 1995, Penn-Edwards 2004, Ratcliff 2003).

There is a sizeable literature dealing with different aspects of the use of video in research. Part of this literature addresses the technical

aspects such as how to film involving such issues as light source, type of microphones and so on (Duranti 1997, Goodwin 1993, Jackson 1987). Some sources deal with the important issue of transcription of video data (Asch 1988, Edwards & Lampert 1993, Green, Franquiz & Dixon 1997, Ochs 1988, Roberts 1997, Schieffelin 1990), while others discuss the issue of analysis of video data (Erickson 1992, Erickson & Schultz 1982, Goldman-Segall 1998). Ethical aspects in the use of video have also received some attention (Arafeh & McLaughlin 2002, Besnier 1994, Ruby 2000).

Within this body of literature, a number of researchers have made a strong case for the inclusion of video as an indispensable research tool. Grimshaw (1982), for instance, has discussed the permanence of video data that provides unprecedented assistance to the field researcher. This unique feature enables the researcher to re-visit the field as many times as needed which ultimately enhances analysis and interpretation. With each re-viewing of events in their wholeness, the researcher can change analytical focus and arrive at a deeper understanding of those events.

Others such as Dufon (2002) and Radcliff (2003) have discussed the affordances that the density of video data provides to the investigator. Compared with traditional paper and pencil field-notes and audio recordings, video records are far richer. Handwritten field-notes fail to capture minute details of social interactions such as the exact words that participants express or the way they are expressed. Video data are also much richer than audio data because they capture both linguistic and paralinguistic features of the context. These unique features make video an indispensable tool in studies that rely on discourse analysis where there is a focus on the exact utterances of interlocutors as well as the relevant non-linguistic context that has a bearing on making sense of those utterances. A word of caution here is that while this feature immensely renders video data rich, it complicates data analysis. This important issue is discussed later in the paper.

A number of other researchers have discussed video data and their effects on the dependability of research (Arborelius & Timpka 1990, Lundevall, Njolstad & Aaraas 1994, Goldman-Segall 1995). Goldman-Segall (1995), for example, has pointed out that video transposes events across time and as a result it makes it possible that several researchers observe the same event(s) and arrive at distinct interpretations. Labeling this as 'configurational validity', she argues that multiple interpretations can result in theoretical triangulation and ultimately add to the trustworthiness of research.

Rationale for the use of video as a data collection tool

In a research study that was informed by the socio-cultural perspective of literacy, we investigated how collaborative learning occurred in different types of adult literacy programs. To explore the issue, nine program sites including formal and non-formal literacy programs in a large urban city in Eastern Ontario, Canada, were investigated over a period of four months in 2005. As a major part of data collection, the research team observed and video recorded one full class session at each of the nine program sites as learners were engaged in collaborative literacy learning, which resulted in 11 hours of video data.

Using our own study as a point of reference, in this section we offer a rationale for the use of video in research, and highlight the key methodological issues in the use of video in research. This section is organised in three main areas: the epistemological nature of video data, capturing the depth of the participants' perspectives, and the practical logistics of using video.

The epistemological nature of video data

A major motivation for the use of video data in our study stemmed from our epistemological orientation regarding the nature of video data as well as the issue of conducting research involving

literacy learners. As with any ethnographic study, in order to arrive at valid interpretations of observations made within the classroom cultures, it was necessary to draw upon the insiders' perspectives. For example, we wanted to know whether a particular posture by a learner meant interest, bewilderment or just boredom. This was especially important because the English-as-a-Second-Language (ESL) learners in the programs who came from various cultural backgrounds occasionally seemed to exhibit unique culturally patterned postures and gestures.

Capturing the depth of the participants' perspectives

To capture the participants' perspectives, we incorporated video simulated recall sessions (Calderhead 1981) with the learners as well as the teachers. During these sessions, episodes of the video data were played back and the participants were queried about the meaning of what was being observed. For instance, one of the class video recordings involved an episode where learners in small groups were working together on a booklet. During a subsequent viewing of the episode with the learners in the episode, they provided valuable information about the scene. It transpired that one of the learners had just taken the Canadian citizenship exam, and that the other learners had asked the instructor to include the citizenship exam booklet in their activities because they felt they would some day have to take the same test to become Canadian citizens. Without this input from the learners about what had been observed, we would have probably missed the importance of this literacy event, and the fact that the learners had a voice in the development of the curriculum.

The practical logistics of using video

Practical logistics was another reason for our use of video. Most of the learners attending the literacy classes were mature individuals with busy life schedules, and very often they could not be interviewed right after our observation sessions due to their other life commitments. It often happened that there was a one- or even two-week time lapse

between actual observations and the individual interview sessions. The video records refreshed the participants' memories about what was happening on the day we conducted the observations. As the participants were watching the recordings, they experienced the events again and were able to provide detailed information on what was happening while they were assisting, or being assisted by, their peers.

Another logistical reason for the use of video derived from the division of labour among the research team. The team comprised five members, two of whom carried out the fieldwork including the observations, video recordings, interviews and document collection. The video records made it possible to bring in virtually the literacy classes to the analysis sessions attended by all team members where everyone could observe the participants' interactions in the field. We also believed that through such collaborative viewing sessions, we would add more rigour to the study. Team members could view these video records together and offer their unique interpretations and points of view. This analytical collaboration added strength to the study through the layers of interpretations and by having a thicker description that could not have been accomplished individually.

Procedural decisions in using video recordings

In this section, we describe some of the decisions that were made as we videotaped class sessions. The focus will be on four main issues encountered during the data collection phase of the study: conditions for using a fixed or moveable video camera, determining the content of the video recording, the effects of the videographer's presence, and ethical practices.

Conditions for using a fixed or moveable camera

The first set of decisions involved whether to use a fixed or moveable video camera. Initially, we had decided to use one fixed camera and

record as much contextual information as possible using long shots. The rationale for this approach was to cover as many learners and collaborative events and practices as possible in each class. However, once inside the individual program sites, we abandoned this idea and modified our approach. Some of the students expressed reluctance to be filmed due to their cultural or personal concerns. Therefore, instead of using long shots, we used narrow angles in order to exclude those learners from the footage. This decision in turn resulted in filming with a mobile video recorder.

On another occasion, the structure of the literacy class required the use of a fixed video. This particular class was a simulated workplace kitchen and its physical arrangements made it impossible to move around and capture the learners from different angles. To reduce intrusion and avoid interfering with the 'naturalness' of interactions, we decided to use a fixed camera from only one angle. The use of a fixed camera, however, affected the amount of data collected because from this fixed angle we could only film one pair of learners working in collaboration.

Determining the content of the video recording

Another important decision was whether to shoot the whole learning event or partial segments of it. Some researchers (Corsaro 1982, Erickson 1992, Heider 1976, Blum-Kulka 1997) caution about the difficulty of establishing boundaries of collaborative events. With this in mind, we decided to start videotaping whole class sessions without interruption. Filming started a few minutes before the session and continued a few minutes after the session to make sure the whole learning event would be captured. This decision was in part motivated by the qualitative nature of our research. To guard against theoretical biases that would predispose us to focus only on certain events (Denzin & Lincoln 2000), we decided to include the whole picture to capture the unexpected.

An additional decision centred on who should do the filming. Early in our video recordings, it became clear that, for the most part, we had to use a mobile video which required two researchers for each filming session. One had to function as the videographer to focus on filming the events and interactions while the other researcher had to take fieldnotes. Using this approach, we were able to supplement the video records with further observational information that moved beyond the frames of our video camera. The downside to this decision, of course, was the obtrusiveness of having two outsiders in the class.

The effect of the videographer's presence

A further decision to be made during filming concerned what is alternatively referred to as reactivity (Bottorf 1994), monitoring (Grimshaw 1982) or reflexivity (Collier & Collier 1986). All of these terms relate to the important effect of the videographer's presence on events. This was a crucial concern as we were interested in naturally occurring collaborative peer interactions. Although in any case study research the presence of the researcher inevitably influences what is recorded (Atkinson, Coffey & Delmont 2003) , in the case of research involving video recording, this effect can be much greater.

Early on in our study and our trial filming, we realized that the very presence of a video camera tended to make some learners uncomfortable and could affect their natural behaviour. Since each class was to be video recorded only once, we were running the risk of what Grimshaw (1982) calls 'strip-mining', that is, parachuting into a site, doing a short video recording and evacuating the site without any kind of rapport building with the participants. In an attempt to reduce the negative effects of video recording and to avoid strip-mining, it was decided to contact the instructors well in advance and ask them to explain the data collection technique to their students before we visited the class. In addition, on the day of the filming, we set up the video a few minutes before the class started, and left the room. We thought that when students saw the camera standing as a piece of

furniture in class, they might become less anxious. Later on, at the start of the class session, we introduced the research to our students in simple terms, indicating the reasons for the use of the video and asking them to share their concerns about the technique.

In most cases this helped. However, occasionally we ran into difficulties. For example, in one class that mainly comprised learners in their late 50s and 60s, none of these steps seemed to alleviate apprehensions. Faced with this untrusting situation, we assured the learners that at the end of the class we would be showing them the footage and would edit out any sections with which they felt uncomfortable (Pirie 1996). To our surprise, after they watched the video-taped session, the learners clearly seemed relieved. It also promoted rapport with them, so much so that they even asked us to take digitally their photos and electronically mail them back to each participant.

Inspired by earlier research (Corsaro 1982, Martin & Martin 1984), we also took the additional measure of informing all the participants that we would be showing segments of the video-tapes to them during our semi-structured interviews so that they could help us interpret the clips. This helped to bring the research participants into the process and gave them a sense of ownership. It soon became apparent that these steps also made some learners curious about the research study which in turn helped to recruit participants for the interviews.

In most of the classes that were filmed, these measures appeared to be effective as many of the students seemed to forget that there was "video recoding" in progress and continued their engagement in class activities. In all filming sessions, every attempt was made to avoid being evasive, hurried, and obtrusive. We explained our intentions to the participants, reassured them about the confidentiality of the video records, and asked them to tell us how to film them and how to interpret what we had video recorded.

Ethical practices

Ethical practices were also foremost on our minds. Although such concerns are important in any type of research involving human participants, they are more pronounced when researchers videotape participants. The nature of such data makes it difficult to preserve the confidentiality of participants. Although it is possible to edit digitally or mask the faces of participants to protect their identity, such data can provide a lot of other clues that might reveal their identities (Arafeh & McLaughlin 2002). Such clues can include participants' voices and the physical signs that might reveal locations. Further, while the permanence of such data acts as an asset for the researcher, for participants it can pose a threat. For example, one instructor who was teaching specific content in the literacy program for the first time was rather apprehensive about being filmed. Before she consented to allow the researchers into her class, she requested that she would like to see the video recording after the session was completed. With us complying with her request, she seemed to be more at ease and in the end wanted the video recording to be included as a data source from her program.

Developing a data analysis approach for the video recordings

One of the most challenging tasks encountered in the study was developing a data analysis approach for the 11 hours of video data that we had collected. Data analysis is perhaps the most daunting task associated with the use of video given its multi-modal nature (Lancy 1993, Ratcliff 2003). To tackle the challenging task of analysing video data, researchers should consider three main procedures to analyse the data: reducing the video recording data, developing a video analysis coding grid, and using the grid as an instrument for analysis. In what follows we describe how we accomplished the task in our study to serve as an example.

Reducing the video data

As with any analysis of data, the first step is to reduce the data. However, the multimodal nature of this type of data makes it a much more difficult task. In our particular case, the first step in analysis was to figure out how to make sense of over 600 minutes of video recordings that had been collected. There was a need to impose a structure on the video records to address adequately two questions that were essential for each type of data source: what are we looking for? and what do we see happening in the video records? We then returned to the theoretical context of the study which helped us focus on sections of the videos that were directly related to our research questions. We had set out to understand how collaborative learning activities such as guided participation, scaffolding and cognitive apprenticeship happen among peers in different adult literacy programs. Using the theoretical lens helped us to focus on theoretically relevant episodes of the data, thus constituting the first step in video data reduction.

To reduce the video data further, we relied on observational techniques associated with qualitative ethology (Bottorff 2003, Wolcot 1992). Qualitative ethology, which is a disciplined observational method used in the close study of behaviour under natural conditions, offered ways to render the video data manageable, and it ultimately helped with the analytic meaning making process. One fundamental technique in ethological method is that of qualitative discovery, involving the inductive identification and description of important segments and regularities in behavior (Bottorff 2003). Based on this technique, we repeatedly watched selected portions of the video data that were directly related to our research question, identifying and describing important segments within each clip. Through this inductive identification process, we came up with several criteria that included literacy domains (subject and activity), gender variation, number of participants, unique

behaviours, quality of learning interactions, and the technical quality of recordings. We then chunked each one-hour video-tape into several five- or ten-minute video logs. A video log is a smaller unit of content that meets those criteria.

Developing a video analysis coding grid

In order to talk meaningfully about the reduced data and achieve consistency across episodes and researchers in interpreting the reduced data, it is imperative to develop a video analysis coding grid. In our study, after we conducted the first level of data reduction, we soon realised we needed to find ways to analyse the collection of video logs. If our observational data set consisted only of written field-notes, our analysis task would have been comparatively easier because, in working with written texts, it is easier to retrieve, code and interpret data. However, with the video records we were faced with both oral communications using language and with non-verbal behaviours and posturing that were directly related to our research question. Our next task was to develop a systematic way of viewing and analysing the logs that would help us meaningfully discuss what we were seeing in each video log.

To do this, we turned to the research on observing and recording collective action in the sociological literature. We then developed a *Video Analysis Coding Grid for Adult Literacy Learning* (see Appendix A) by drawing upon the work of Schweingruber and McPhail (1999). This taxonomy helps to identify the collective action of individuals in public gatherings with reference to four broad dimensions of facing, voicing, manipulating and locomotion/body position. Each of these dimensions is then divided into a number of exclusive categories and in turn broken into a number of elementary forms associated with the broader dimensions.

This type of taxonomy has a useful organising structure and serves as a good instrument for analysing video data about particular

behaviours in public events. However, it required further development to reflect the human activity system of a learning environment. In an earlier study examining the Zone of Proximal Development with literacy learners, Taylor, King, Pinsent-Johnson & Lothian (2003) developed a Literacy Observation Checklist which identified the key categories and detailed elements for observing social learning behaviours, feedback behaviours, negotiation behaviours and patterns of directionality in a formal literacy classroom. This data collection tool was used to modify the taxonomy into a video coding grid.

Four similar broad dimensions were kept in the instrument and included *Facing, Verbalising, Manipulating Materials and Body Locomotion*. Each dimension was further broken down into specific behaviours or forms that were associated with the sub-categories of the Literacy Observation Checklist. For example, in a small group or dyad, the direction people were facing in and their proximity to each other helped to determine both the type and quality of support an adult learner received or provided (*Facing*). A second dimension, named *Verbalising*, identified the type of talk that transpired in the small group interactions and focused on five specific skills that were used during oral communications. *Manipulating Materials* was the third broad dimension and included the major types of learning resources that adults use in a classroom or group. The final category, *Body Locomotion*, focused on six non-verbal behaviours that were important in building a positive climate among peers during a small group interaction or dyad. Across all dimensions, an open-ended category was included and allowed a viewer to add other behaviours not named while watching the video logs. Once the grid was assembled into a chart form, a trial run was conducted on a number of different video logs and minor formatting revisions were made.

Using the grid as an instrument for analysis

The coding grid was very useful in talking meaningfully about how learners supported each other in small groups or in dyads. This coding scheme afforded a simple and clear enough means with which research team members could micro-analyse how the more capable and less capable learners actually scaffolded each other in literacy learning. In the micro-analysis of the video logs, the coding grid functioned as a crucial analytical instrument. Using the grid, team members repeatedly and carefully viewed the logs and coded the learners' interactions. Once this step was completed, we came up with an *ethnogram* (Eibl-Eibesfeldt 1989), or a textual description of the behaviours observed in the video logs. Each researcher wrote an ethnogram that was based on the reduced data for each of the one hour video tapes. The resulting ethnograms were then subjected to content analysis to identify themes and patterns. As each of the five other data sources were prepared, reduced and analysed separately, they were all brought together using the constant comparative technique. This database yielded a rich and thick description of how collaborative learning occurs. A detailed report of the investigation can be found in Taylor, Abasi, Pinsent-Johnson and Evans (2007).

Concluding remarks

The unique features of video data such as permanence, high correspondence with reality and its comparatively high richness can be of considerable assistance to the adult literacy researcher. Although there are downsides to the use of video – for example, it might make recruitment of participants or gaining access difficult – on balance, the benefits can outweigh the downsides. Our firsthand experience of using video as a data collection tool prompts us to advocate its use. However, we also think that it would be wise to consider carefully, well in advance, how the video data will be handled. It would be useful to conduct a trial run using the process

that we have described and devise an instrument such as the analysis grid explained in this paper.

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Appendix A

Video Analysis Coding Grid for Adult Literacy Learning

Researcher	Video-tape code	Date of recording/ programs	Date of analysis

		Video log 1	Video log 2	Video log 3
Number of participants				
Facing	Across			
	Side by side			
	Far proximity			
	Other			
Verbalising	Questioning			
	Explaining			
	Discussing			
	Reading			
	Prodding			
	Other			
Manipulating materials	Paper			
	Newspaper			
	Dictionary			
	Workbook/sheets			
	Calculators			
	Computer			
	Other			
Body locomotion	Laughing			
	Touching			
	Pointing			
	Drawing			
	Gesturing			
	Listening			
	Other			

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Creating older adults technology training policies: lessons from community practices

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Influencing government policy in adult learning areas requires consistent efforts in having findings noticed by educational policy-makers. Submissions by Adult Learning Australia and researchers have called for unified educational policies and practices across Australia. This paper argues that, whilst it is important to address macro issues of policy formation, research into micro issues can also be valuable in assisting policy formation. Using information technology and communication teaching in a community centre, it considers analysis of informal daily policies and practices and what is working at the everyday level is important. Student experience examples at one centre teaching these skills to older adult are reported to show the types of policies and practices which maximised the long-term running of the centre and long periods of student retention. Like researchers addressing macro adult learning issues, it requires consistent reporting of results to educational policy-makers to remind them of what practices and policies do work for older adults.

Introduction

Lifelong learning for adults over 55 years of age is increasingly continuing beyond ceasing paid work. Yet it is argued that, overall, government educational policy-makers are not keeping pace in forming supportive training polices to manage the growing demands for older adult learning (McIntyre 2005, Anderson 2004). Much attention is being focused on the need to form national educational policies to guide how older adults are taught and how community learning programs are administered. Creating lifelong learning policies for retraining and skilling older adults has individual and community benefits. These benefits include the prevention of individual isolation from the community, access to social networks and the ability to use complex new technologies. Community and non-profit organisations are now major providers of older adult training and they provide opportunities for such benefits.

Governments attempt to create uniform national training policies that advise community training centres on effective ways of teaching adults. Yet it is believed that this process of forming uniform polices is inconsistent (Bardon 2007). Kearns (2005:373) has commented that, in Australia, community learning is little acknowledged as a key contributor to rapid and consistent social change. The assumption

from these comments is that adult training is not a priority for government in policy formation.

Increasing attention is being paid to information and communication technology (ICT) training for older adults. Despite growing demand from retired and working older adults to learn such skills, governments take little interest in forming policies in this area. There have been attempts from government departments to advise on adult learning policy and desirable teaching of older adults. The federal Department of Communications, Information Technology and the Arts (2005), for example, has published case studies on the policy and teaching practice successes of various non-profit organisations. A common theme in these studies has been how community organisations form and administer their own ICT training and skills policies and teaching practices to meet learner needs. Creating effective policies and practices to administer and teach ICT skills for a growing older population, without government policy guiding frameworks, becomes the function of community organisations.

Older adult ICT training policies have been successfully created, particularly in disadvantaged communities, through locally formed policies and specific teaching practices. These communities can be rural or urban areas with ageing populations and low income levels. Often the policies have been successful in attracting learners despite considerable obstacles such as lack of government funding. Though these obstacles have impacted on organisations' abilities to teach older adults ICT skills, longevity of programs and increased student retention rates have been achieved. Two questions for examination arise. First, if the demand for ICT training is increasing, why do some community organisations' training policies and practices encourage community interest and grow their student base without government policy support to guide their programs? Second, what are organisations doing daily that may provide insights into how they are successful in teaching older adults when faced with labour and financial shortages?

To examine these questions, an illustrative, longitudinal example in one community centre will be discussed. The aim of this paper is to contribute to an understanding of how locally formed policies and specific teaching practices can maximise the older adult retention rate. Such knowledge and research can be provided to educational policy-makers as evidence of the types of policies and practices that are viewed as successful in ICT training. This paper suggests that examining student experiences gives educational policy-makers knowledge of what factors can be incorporated into policies that benefit working or retired older adults, and the community organisations that provide such training.

Research on policies and practices in Australian ICT training programs

A policy may be regarded as a general course of action in written form that suggests desirable practices that maximise successful outcomes. Creating local informal ICT training policies has personal and community benefits and outcomes. Reported benefits to older adults in undertaking ICT training include a sense of belonging to a group, encouraging self-sufficiency by accessing internet information and maintaining social and family connections lost after ceasing work (Townsend 2006). Research on effective older adult training needs suggests that ICT training practices and policies should primarily be self-directed and goal specific instead of teaching a fixed curriculum of skills (Poynton 2005, Farrow, Hayward & Huta 2005). Having an absence of such guiding policies and effective teaching practices affects the outcome and uptake of ICT training. For example, a barrier to longevity of ICT training programs has been the management of working relationships of people involved in ICT training projects. The failure of ICT training in some organisations can occur from the lack of policies in managing available voluntary workforces.

Case study research of inadequate workforce management policies, and their negative effects on ICT training programs, was illustrated

in studies by Coco and Jolly (2003) and Coco and Short (2004). A problem they observed was the volunteers' desire to keep the centre inward focused and not publicise its training programs to geographic areas beyond their local surrounds (Coco & Jolly 2003). Disagreements occurred on what topics to teach and how to teach them, hence self-interest and group conflict indirectly caused students not to come to the centre because the offered ICT topics did not suit their needs (Coco & Short 2004). Some workers also did not see any use for ICT training in their own lives despite being shown evidence of its usefulness in the lives of older adults. This negative view was observed by students at the centre resulting in the program's failure to attract and retrain learners (Coco & Short 2004).

Community ICT policies and practices are successful when the policy takes a learner-centred approach and concentrates on solving learners' technology training needs. When they are not at the centre of teaching policy, it is difficult to attract and retain them. Curricula need flexibility in the types and breadth of topics taught. This extract from The Smith Family (2005) report on community education illustrates the focus behind the policy of the learner being at the centre of a learning program:

> That lifelong learning initiatives adopt a learner-centred approach to facilitate self-paced, personalised learning trajectories within a 'whole-of-community' perspective that makes this learning attractive and applicable to people of all ages, genders and socioeconomic backgrounds.

In the context of teaching older adults ICT skills, making learning applicable to people of all ages means knowing older adults have different learning needs and motivations for learning. Making learning desirable to this group means structuring ICT training policies in ways that identify what is important and relevant to the older adult.

Studies in older adult ICT training practices can be useful to alert educational policy-makers to what might constitute success in retention rates of ICT training. This includes knowledge on the workforces who teach and administer ICT programs. Coco and Jolly (2003) and Coco and Short (2004) suggested that labour and financial shortages were not always the cause of the cessation of ICT training programs. Some programs have managed labour issues through much the same way commercial enterprises manage workforce work and relationship issues. The daily level cooperation and working together of volunteers and administrators of ICT programs might be strong enough to overcome the barriers faced by the centre. The ways in which community organisations manage ICT teaching teams, resources and learner relationships can give governments information on informal practices that support older adults in ICT skill acquisition. Therefore, these practices, when communicated to government bodies, can be incorporated into the formation of policy by showing how good labour management impacts on positive outcomes of older adults training.

The centre and the study

The research site and research methodology is presented here as an example of ICT training taking place in a local community. What has been observed is that this centre's ICT training program has continued through the forming of its own training and workforce management policies. The centre in this study has been offering ICT training since 1996. Similar to Coco's and Jolly's (2003) research site, the centre is in a perceived economically disadvantaged community with an ageing population and a lack of employment opportunities. The centre designs its activities based on the World Health Organisation's (1946) definition of health, as a state of complete physical, mental and social well-being, not just the absence of disease. Although many physical, social and intellectual activities are offered,

it has been the computer program that has achieved the longevity that other disadvantaged communities have been unable to sustain.

The centre's voluntary tutors range in age and are retired or sourced from Federal Government employment mutual obligation programs. Some tutors have extensive backgrounds in information technology disciplines. Three computers, two with broadband internet access donated by a local council, have a variety of software programs available to be taught. While some formal computer awareness classes are held, the tutors have adapted their lessons to the needs of the learners. Two crucial factors in older adult learning, identified by Knowles (1990:229), are adopted as policy in the centre's program: learners want to learn ICT topics according to their past experiences and they want a tutor interested in their skill and personal development. The ages of the learners range from 55 to 80. Some are from ethnic backgrounds and are catered for when tutors have second language skills. The tutors also update the centre's website and provide technical support such as installing software and fixing hardware issues.

This paper's discussion and insights were formed from data collected since 2002. Interviews with older adults and observations of lessons were the data collection methods. Analysis of the data was informed by grounded theory (Strauss & Corbin 1998). Explanations accounting for the observed phenomena that learners kept returning to lessons emerged from constant data analysis and comparison, with a set of categories being formed which explained the perceived view of centre success in consistently high student retention rates. Grounded theory was useful in being able to provide a framework for discovering reasons for older adults' decisions to undertake and regularly attend training, rather than to prove or disprove theoretical explanations.

Experiences of one community centre's ICT policies and practices

The key finding was that the centre's success in retaining learners was primarily attributed to the tutors, centre management and student working relationships. A problem-solving approach to ICT training practices was an effective teaching strategy in attracting and retaining older adult learners. Although set ICT topics were taught, the tutors concentrated on solving learner specific information technology problems. The teaching policy that centre management formed as the basis of its ICT training was identifying the type of technology issues older adults struggled with in everyday life. In doing this, they were able to problem-solve computer issues by showing the exact procedure to perform the action correctly. However, this was done without assuming the learner knew what other users might take for granted. This example of teaching website navigation, a requested skill in older adult ICT training, is an illustrative comment of this practice from the learner's view:

> … because he always asks me what I'm interested in. And I've already a couple of things on the website so we did that today. I sent one, got one thing up on the website, it obviously worked because I asked for a catalogue and I received that yesterday.

The tutor specifically asked what the learner's problem was with obtaining the internet information. When shown sequentially how to navigate a website to find the catalogue, it solved the learner's problem of finding information on a difficult to navigate web page. This practice became adopted common policy amongst the tutors, despite it not being incorporated into any written requirement of tutors' duties.

The centre's tutors and management were also aware of the demand to learn skills to communicate electronically with family, friends and others. An effective teaching practice was to teach older adults electronic communication skills, such as email and chat room use. A common finding was that, although the teaching practice of providing

technical explanations was important, the learners were encouraged to use this medium to communicate with distant family and friends. One learner found handwriting difficult; a tutor taught her how to use email to overcome the lessening written contact she had with family and friends:

> I'm really interested in using the Internet and sending e-mails, mostly sending e-mails (pause) which my family, I'm not very good at letter writing and I find it so easy, and I keep in touch with my daughter in the UK and I used to live in Kenya and keep in touch with friends there. So it's very, very good.

As this example suggests, the tutors encouraged such attitudes by bringing the learner to this level of confidence through showing how to gain control over the medium. This was based on tutors informally assessing that the learner was absorbed in the experience and was gaining control over a challenging experience, as Cody *et al.* (1999) suggest as optimal teaching practice.

The centre conducted most lessons between a tutor and one learner rather than group training. A strong argument for this policy was that many older adults attending the centre's lessons preferred greater control over the pace of learning material. That did not mean every learner was physically or emotionally challenged in some way. Rather, it was that more formal training environments, such as at TAFE and with online learning, did not offer an important skill that is frequently overlooked – the need for tutors to repeat instructions constantly. This was a significant issue that older adults reported in seeking out ICT training: the feeling of inadequacy in not keeping pace with others, particularly younger people, in classroom situations. The practice of repetition and individual attention is illustrated in these two quotes:

> Because of the one-on-one. And as I mentioned, anything I don't understand or, you know, he will show me again and I find that most helpful.

> Probably the fact that it was a one-on-one basis rather than group lessons. I find group lessons and the fact that I can choose what I want to learn here, where I can quote if I go to a group, you have to follow what they want to tell you and I not interested in that …

Tutors followed the policy, suggested in studies such as the internet adoption study by Mellor, Firth and Moore (2004), that there should be willingness by tutors to conduct lessons at a slow pace, repeat material and reassure the older adult that failing procedures were a learning experience, not a fault of the learner.

Another policy that centre management created was to encourage cooperative working relationships between tutors and administrative staff. Whilst Coco and Jolly (2003) and Coco and Short (2004) consistently found team members were uncooperative toward each other on training issues, the centre tried to avoid this situation. Regular meetings addressing worker issues and relationships were held. Although set policies existed on how tutors should behave toward older adult learners, the informal understandings of conduct were learnt and passed on to new tutors by the more experienced tutors. This behaviour was, in turn, observed by the learners, who repeatedly reported that a new tutor was not a reason to cease having lessons, as this example suggests:

> No, a combination of whoever is available, there is no preference. One is as good as the other, I find. Age certainly has nothing to do with it. Some I have been sorry to see go for better things, but for their own sake, I am happy for them.

This view was encouraged by the policy that tutors were to be aware of the study needs of their colleagues' learners in case any of those colleagues should leave. The tutors also sought information from the internet, each other and their informal professional networks to solve problems when they encountered material they could not teach. One tutor had a greater knowledge of Microsoft Excel procedures, while

another was proficient in fixing hardware problems. Both worked with, and learnt skills from, each other while solving the learners' areas of concern. The centre ensured, as a policy, that the tutors could interact with and teach the learners the same material if any learner's main tutor was not available.

Getting older adults interested in ICT training involves persuading them how training can improve their lives. Cost of lessons, identified as a major barrier for older adult participation in ICT training (DCITA 2005), was not a critical issue at this centre. Lessons were kept at a minimum price with only one increase since this study was undertaken. There were two main policy issues that tended to hinder the program's progress in terms of attracting more students. The first was promoting the computer lessons to a wider geographic area in the community. While the centre had some advantage in being able to tailor the training, there was reluctance to compete actively for student attendance. Word of mouth advertising was preferred over large-scale media and poster campaigns. The second issue was opposition from other groups using the centre that ran craft and game activities in the same open room as the computer lessons. Whilst some learners from these groups became curious about the computers and attended lessons, some centre participants were hostile in their comments of the invasion of their space. This did not stop the lessons from proceeding. Rather, it meant centre management and tutors needed constantly to convince the groups that the computer lessons would not interfere with other established activities.

Having the computers in the same room as other activities affected participant relationships between the computer tutors, learners and other group members. For example, one leader of another group made persistent negative comments directly to the tutors and some other students. As Coco and Short (2004) found in their study, this can influence others' decisions to attend lessons because of the perceived credibility the other activities' leaders have in negative

and positive views of the computer lessons. To address this, the centre's management adopted a continuous but subtle strategy of compromise, where lessons could be postponed if the other group were already engaged in an activity. This suggested the need to be aware of undertaking ICT training in mixed use community centres. Although there was still hostility from members of other groups, the computer lessons continued. However, this situation suggests a policy that space devoted to ICT training should be separate from other activities to reduce potential conflicts over ownership of physical space.

Can community ICT research experiences influence adult learning policy?

This study demonstrated that the centre's ICT policies and teaching practices contributed to its longevity and retention. It did so by concentrating on the ICT needs of individual learners. But it did so with, initially, no guiding frameworks from government on what policies and practices could be successfully used to teach older adults. It was the willingness of the centre's management to experiment continually with teaching styles and ways of administering the program which saw it continue. Those daily activities were observed over time and by describing them in the study, a conclusion can be reached that certain practices of teaching and administering ICT programs do tend to be successful in retaining adult learners.

Authors such as Bardon (2007), Anderson (2004), The Smith Family (2005) and the DCITA (2005) address macro community issues affecting educational policy. They all argue for unity and national standards of adult educational practice, whether for retraining adults or training those no longer working. But the belief here is that, without paying attention to what works in terms of micro-teaching practices and policies developed, often without guidelines, policies can be developed which can advise optimal and desirable ways of

managing ICT training. Though not every practice may work in every centre, the study still showed those practices and policies that maximised the longevity and retention rates of learners. They can contribute to an understanding of what can work in older adult ICT training and be reported to community training providers.

To illustrate these claims, the value of such evidence to policy-makers is demonstrated in addressing this study's research questions. The first question as to why community interest and student retention rates can be successful without guiding teaching and policy frameworks from government is answered by the study's observations. The centre maintained interest in the ICT training because the tutors practised solving individual learner's information technology problems. There are few if any government funds for specifically training teachers and tutors in older adult learning. But through trial and error, the centre's management observed and incorporated into policy those teaching practices to which learners positively responded.

A key teaching practice example is reassuring the older adult when an action on the computer does not seem to work. This suggests a different framework of teaching from that used for adolescents or primary school students. Educational institutions have specific teaching programs for middle-age school students where teachers are taught ideal techniques for teaching this age group. This gives a framework for teachers to present material in a way that suggests teaching this group will result in the retention of knowledge. The same is not happening for older adults, though this centre has noted and applied in its teaching policy specific ways of assisting older adults to retain and apply ICT skills to daily life.

The second question related to what organisations are doing daily that may give insights into how successful they are at teaching older adults when faced with labour and financial shortages. Like commercial enterprises, teamwork, volunteer people management and resource

management are crucial to program continuity. This centre managed the tutor workforce by adopting important cooperative work policies. First, a formal induction meeting was held where centre management would explain the particular styles of teaching for older adults. Second, provisions were made for other tutors to continue teaching learners should any tutor leave. But, as in paid workforces, drawing on the knowledge of tutors, however long they taught there, was vital. With their vast knowledge of computer issues, they were able to research and teach current and emerging information technology issues.

How documented research experiences may influence policy is by providing examples of successful learning polices and practices. The work of Coco and Jolly (2003) and Coco and Short (2004) documented types of problems an ICT training centre can have with relationship conflicts and a lack of reported guidelines about what constitutes good practice. In this sense, such cases of positive and negative experiences alert policy-makers to what is happening in the growing ICT training area. Bardon's (2007) agreement with a description of community centres as being learning providers can be achieved but not without awareness of what these centres actually do, and how they can manitain ICT training programs.

The problem in presenting such material to policy-makers lies in the commitment persistently to provide research to government entities. Our experience of contact with educational policy-makers and government bodies is that educational departments are interested in finding out about the program's success. However, the centre had to stay persistently in contact with them and consistently send reports which were, for the most part, ignored. It is difficult when policy-makers have other educational imperatives and centres often have to wait for formal requests for material as the DCITA has sporadically done. This may lie with the fact that older adult learning is not so directly tied to economic outcomes as are primary, secondary and most tertiary education and training.

Nevertheless, the argument here is that presenting research evidence to policy-makers that will assist in supportive policies for older adult ICT learning is a necessary imperative. Without more information on how older adults are learning, and continuing with that learning, educational policy-makers risk being isolated from forming policies to serve this group. What was useful about the reviewed studies and this study was to show in finer detail what worked and what did not work for ICT training centres. This is valuable as it provides the types of information and valuable lessons that can form the basis of policies and practices for those venturing into the teaching of older adult learners. The challenge is to find those in educational policy-making who can make this area an imperative and create policies to guide good ICT teaching practice.

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RESEARCH REPORT

Propensity to lifelong learning: Reflections of a research student

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My tertiary learning journey began as a research assistant reviewing educational literature. I wondered why, among the mountain of lifelong learning literature, I could find nothing that explained why people are or are not lifelong learners. It appeared to be taken for granted by policy-makers, decision-makers and researchers that everyone either is, can or will be a lifelong learner. It appeared that no one had asked the question "What makes a lifelong learner?" So I asked the question and began a masters degree.

Eventually I found the British work of Gorard and Selwyn (2005). They had asked the question in the British context and, after

conducting 1001 interviews, put forward an answer which included seven determinants. As five of their determinants were located in early childhood and two in adult life, I began to contemplate the implications for early childhood education and for adult learning. Mindful of Osborne's (2002) caution about making international comparisons, I conducted a pilot study investigating whether there might be a *prima facie* case for the proposition that the British findings are, or may be, either generalisable or transferable to the Australian context. Asking "What makes an Australian lifelong learner?" became the topic of my masters research project and now my doctoral study.

From the Organisation for Economic Cooperation and Development (2004) to Education Queensland (Moran 2000), lifelong learning for all has been advocated as both an economic and a social and individual good. There has been little discussion of the questions 'Who says?' and 'How do we know?' These questions suggest interesting implications for educational equity and policy. I am drawing out these implications by asking whether everyone can in fact be a lifelong learner, whether everyone wishes to be a lifelong learner, and what influences or determines propensity to lifelong learning.

It is fundamental to the equity of lifelong learning policy that answers to such questions be known, and the literature indicates that, with the exception of Britain, the questions are not being asked. It is arguably of concern that 'the determinants of participation are so widely misunderstood' (Gorard & Selwyn, 2003: Background section, para. 1). Laver (1996:5) made a similar observation about the Australian context: 'Some of the causal connections between students and lifelong learning are not easily understood'.

The Adult Learning @ Home research project (http://www.cf.ac.uk/socsi/ict/) is arguably the seminal work on the determinants of lifelong learning. This British work was conducted by researchers Stephen Gorard, Neil Selwyn, John Furlong and Louise Madden between 2002 and 2004. Seven determinants of lifelong learning were identified, none of which in terms of lifespan are located

between early childhood and adult life. The key social determinants were found to be time (of birth), place (of birth), gender, family (influence) and initial schooling (influence). It was found that experience of initial schooling is the key influence of post-compulsory learning; experience of work and adult family life are the key influences of later-life learning.

Gorard and Selwyn (2005:1205) claimed that 'the vast majority of variation in patterns of participation that can be explained is explained by variables that we could have known when each person was born'. Their discussion of learning trajectories also indicates that whilst trajectories are predictable they are not set for life. They also found that over a third of the adult British population do not participate in any post-compulsory learning, and that the usual barriers to access were not the explanation. Watson (2003) has found similar rates of non-participation in Australia. Using an adaptation of Gorard and Selwyn's instrument with a small local sample, I found a *prima facie* case that the British findings may indeed be generalisable or transferable to the Australian context (White 2006).

As a typical type one personality I love a cause, something that matters, something that makes a difference. The fundamental question of what makes a lifelong learner has provoked my curiosity about an issue which is increasingly significant to society generally and individuals particularly; its answer matters and may make a difference. My work so far has suggested some particularly interesting answers to the questions I am posing. As is typical of research, one thing leads to another and researchers' curiosity draws them ever onwards towards outcomes which add to knowledge, contribute to society, and provide personal satisfaction for the researcher. I am no exception and I love it.

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BOOK REVIEW

Qualitative research in education – a user's guide

Marilyn Lichtman
Thousand Oaks, CA: Sage Publications, 2006
ISBN: 0-7619-2935-5
249 pages, US$39-95

Marilyn Lichtman is a retired professor of educational research and evaluation from Virginia Tech in the USA. Based on her own extensive experience as a student, teacher and researcher in education over many years, this book is offered not only as an introductory text to the field, but as a basic manual for those undertaking research in education using a wide range of qualitative methodologies. It is the kind of practical how-to book that Lichtman reflects was not in existence in the early days when qualitative research was seen as radical, somewhat inferior and not well supported by a theory base (which was not really that long ago), and so she has set out to construct a text that would, as the sub-title suggests, be a 'user's guide' to the field for teachers, researchers and research students.

In this, she has succeeded admirably. The book is well structured, written in the first person and therefore accessible and readable, and the contents are logically presented and understandable. In a field dominated by jargon, key terms such as **phenomenology** and **postpositivist** are introduced in bold type in the text to show that they are included in an extensive glossary of terms containing handy definitions at the back of the book. As well as being practical, however, the book takes a historical approach to the field.

Part 1, 'Traditions and influences', outlines the various developments that have contributed to the diversity of qualitative research methods extant today, and includes comparisons with quantitative methods and insights from the past including anecdotes about Tyler, Skinner and some of the other theorists who have influenced the field of educational research. Subsequent chapters then focus on the pragmatics of research questions, ethical issues and inductive approaches to illustrate the practical application of such frameworks as grounded theory, ethnography, phenomenological enquiry etc. Throughout this section, Lichtman reinforces the view that, while qualitative research in education has inherited many insights from the past, it continues to evolve and adapt to developments in society and technology and therefore offers the opportunity for creativity and resourcefulness where traditional research methods tend to be conservative and conformist.

Part 2 is entitled 'Gathering, organizing and analysing', and as the title suggests, takes the reader through the steps involved in conducting qualitative research, such as getting started, how (and why) to undertake a literature review, the use of naturalistic inquiry, and features a whole chapter on interviewing techniques including purposes, issues and challenges. Case studies and examples support this discussion, and at the end of each chapter, Lichtman offers both group and individual activities to summarise and focus the key points, reinforcing the value of the book as a tool for both classroom teaching and self-directed study in tertiary settings.

Part 3, 'Putting it all together', begins with a chapter entitled 'Making meaning from your data', which takes the reader through not only the important process of identifying trends and developing themes from data, but also developing a philosophical stance to the interpretation of qualitative data. This is perhaps the most difficult aspect of qualitative research to understand and also to teach, and Lichtman discusses some helpful ideas before offering a practical six-step process to data analysis and addressing questions such as whether to transcribe, when to stop analysing and how to use computer programs effectively. This is followed by a chapter on guidelines for writing and presenting qualitative research, including the use of the first person, the use of other voices, identifying your audience and developing a structure to the text. Research degree students faced with producing a tightly-focused thesis from a mountain of qualitative data will find these chapters particularly useful. The book concludes with chapters on the role of the researcher in judging and evaluating research and being a reflexive researcher, ending on a note which reinforces the personal learning journey that inevitably unfolds in doing qualitative research and is inextricably linked with the subjectivity that it characterises.

In conclusion, this particular user has found Marilyn Lichtman's guide to qualitative research in education a practical, readable and quite inspirational addition to the literature in a field of endeavour that seems to be attracting more and more researchers, particularly higher degree students in education for whom this book could become a recommended text alongside the 'bible' by Denzin and Lincoln.

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BOOK REVIEW

People, processes, projects: harnessing complex socio-technical systems

Errol Lawson (ed.)
Mawson Lakes, SA: University of South Australia, 2007
ISBN: 978-0-9775208-2-4
140 pages

Errol Lawson is an adjunct Associate Professor with the Systems Engineering and Evaluation Centre (SEEC) at the University of South Australia. He comes from an illustrious career consulting in systems methodologies, principally with the defence sector. The foreword is by Professor Stephen Cook, who is Professor of Systems Engineering at the University of South Australia.

The authors of each chapter are students in the Masters program in project management. All are senior managers of the Australian Defence Materiel Organisation (DMO). Each of the 11 chapters is the final assignment that students undertook in their degree. It was a great idea to turn their work into a publication. Excellent work is done each year in thousands of research projects that would not otherwise see the light of day.

The theme common to all chapters is the importance of social systems, which complement the structural and systemic process issues that traditionally take the time of project managers. This book is an attempt to put together a coherent body of knowledge from which to develop a case for the explicit inclusion of social system concepts in project planning, implementation and post-project analyses.

A cynic would say that it's great that project managers have finally realised the importance of people to the success of their projects. I recall having a conversation with a colleague a few years ago in New Zealand. We commented on how great it is that the strategy scholars have finally realised the importance of leadership to the success of strategy. The same could be said of project management. Having said that, scholars have known for many years about the importance of social systems to the success of organisations. Scholars have also known about successful project management. It is refreshing to see that some genuine cross-disciplinary work is being done to further integrate these two bodies of knowledge.

The first seven chapters are based on Dwight Eisenhower's quote that 'The plan is nothing; planning is everything'. Clearly, the importance or otherwise of planning is central to these chapters. The first two chapters have this as the title. It is not until Chapter 3 that an author attempts to have an individual title for a chapter.

Chapters 8 through 10 are about 'forms of capital vs success and failure'. These three chapters are based upon a proposition from Lawson's PhD research, and examine the role of social capital vis-à-vis other forms of capital in the success of projects. Two chapters

have this as a name, but unfortunately only one attempts to broaden the scholarly contribution by giving the content of the chapter its own name. The final chapter is about the 'NAO (UK) Project Gold Standard' but is called 'project control'.

Some coherence between the chapters would have helped. It probably was preferable to let the students choose their own topics. However, it seems less than ideal for a reader to have seven chapters on one topic and only one chapter on another topic. Moreover, if some attempt was made to generate an integrative title for each chapter, the reader would have benefited further.

There is no integrating, concluding chapter from the editor. This would have added hugely to the contribution that this book makes to knowledge about social systems in project management. The editor has written an introduction, but that is all it is. There is potentially a great contribution that this body of work could make. Unfortunately, this contribution is not realised. A concluding chapter is needed that teases out the contribution to theory that is made by these research projects together. This book was designed as a collection of papers for the Systems Engineering and Evaluation Centre, and serves this purpose well.

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BOOK REVIEW

Building professional pride in literacy: a dialogical guide to professional development

B. Allan Quigley
Malabar, Florida: Krieger Publishing Company, 2006
ISBN: 1-57524-262-1
223 pages, US$34-25

The hard cover book, *Building professional pride in literacy*, is one in the Professional Practices in Adult Education Series. The author, B. Allan Quigley, introduces it as a conversational ('dialogical') guide for people involved in adult education and adult literacy. Quigley is Professor of Adult Education at St Francis Xavier University, Canada. He is currently a consulting editor for three refereed journals and has been a board member of numerous American and Canadian educational organisations. In addition to several earlier awards, Quigley received the Cyril O. Houle Award for Outstanding Literature in Adult Education from the American Association for Adult and

Continuing Education in 1998. His research interests are in literacy, social policy, teaching and the history of adult education. He has published widely.

Quigley describes his book as one in which he seeks to initiate 'personal and group reflection' (p. xi) which will lead to change. He proposes that this involves acknowledging that no one theory or theorist has an embargo on educational expertise and that instead we need to make spaces in which we can reflect and develop alternative ways of thinking somewhere in between prevailing theories. Beginning with a learning journal – ideally a process which you share with a co-learner and or a learning circle – the underlying paradigm is one of 'dialogue, reflection and action' with the resultant internal praxis being the means to achieve a greater sense of enjoyment and an increased sense of professionalism in our roles as adult educators. This notion is central to his argument and he describes this professionalism as a rich thesis which grows from the best qualities of a functionalist view of professionalism being combined with a conflict view and with the real needs of learners.

Building professional pride in literacy is very much a North American centric text which is divided into six well constructed, clearly defined chapters, each covering a separate topic and, utilising constructivist principles, building upon the former. He begins by exhorting us to feel proud about being adult educators, rather than accepting the dearth of educational historical acknowledgement in this field as a minimalising of its importance. This chapter then returns to self-reflecting and culminates in the notion of using radical philosophy in the classroom. The book combines reflective practice, theory based definition and didacticism, then turns to the application of adult teaching practice.

The fifth chapter explores action research as a tool for the daily work of adult educators. In chapter six, Quigley summarises the content by returning to the basic premise of the need to develop professionalism

as state of mind, rather than relying on a checklist of certifications as an indication of professional expertise.

Building professional pride in literacy is a useful, practical introduction for a newly engaged adult educator and, given the author's enthusiasm and warm conversional style, it may also appeal to an adult educator who needs re-energising after what can be the vicissitudes of an at times challenging and under acknowledged role. His approach mirrors the best extant methods of adult learning principles; he is very knowledgeable, he builds upon readers' previous knowledge, acknowledges the validity of the reader's own experiences and interests, and motivates and inspires us to continue reading the book through his own passion, scholarship and enthusiasm for the subject. The practical sections associated with reflection and journaling are useful, although I am unsure about how many people feel comfortable about writing in hard cover books; perhaps the tables and questionnaire that are embedded throughout could also be added as an appendix which could be removed to fill in separately (albeit these may be subject to copyright restrictions).

The chapter on action research initially puzzled me as it did not seem to fit with the framework of the earlier sections of the book; however, the content is succinct and forms a useful introduction to the applications of action research. The author highlights the paradigmatic issues related to the qualitative versus quantitative debate and provides useful sources of information which support the validity of action research as a methodological approach. The place for this apparently disembodied chapter becomes clearer with the closing sections in which Quigley urges us to develop more websites and discussion about adult literacy research training and workshops, courses and institutes and he asks rhetorically: What if more training workshops were available on-line? I felt that both this query and his pleas for us to become less buried in regional and national (North American) parochialisms were mildly unrelated to my Australian

experience and I was hence slightly disengaged by some sections in these closing pages. I thought, too, that the book focused more generally on adult education rather than specifically on 'literacy'. In a very positive sense, it therefore has wider application than the title would initially suggest.

The philosophy is personal at times; the author asks rhetorically towards the end of the book if his quest for higher notions of profession and personal kudos and valid rigorous research being attached to the role of adult educators is a result of his being 'a hopeless romantic'. However, this is a reflection of his enthusiasm and this engaging book fits in comfortably with similar adult education texts and is a useful companion piece to some of Quigley's other works. This is an eclectic, easy-to-use and involving introductory text for new adult educators and provokes some new thoughts about the topic.

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BOOK REVIEW

Digital nations in the making

Ian Harford
Leicester, UK: National Institute of Adult Continuing Education, 2006
ISBN: 1 86201 274 1, 195 pages, £16.95 (US$33.00, €27.50)

Ian Harford first encountered computers over 40 years ago and has retained his interest in ICT as depicted in this text covering the new technologies and adult learning as experienced by the author in Canada, the USA and the UK.

Associated with the Workers' Educational Association in the UK, the author has a background over many years in working with socially and economically disadvantaged learners in adult education and community settings. The author set out to investigate how effectively authorities had introduced local information technology or community technology centres in Canada, the USA and the UK and was assisted by a research grant from the British Academy for his overseas travel.

Academics, researchers and students in adult and community education will derive benefit from this clearly written and well-structured text. Additionally, the author has (thankfully) provided full descriptions of the very many acronyms to be found in the work, so beloved of British texts, which seem to assume that only well-informed UK readers will purchase the book.

To assist readers, the author has developed a companion website with links to many of the source documents. In addition, a Web Blog site has been set up which has an ongoing function in providing further information and updates. A helpful glossary has also been provided to assist readers with trans-national terminology while copious endnotes clarify items in the text.

The book has four chapters where the author examines the providers of adult and community networks, the internet populations in the three countries and comments on the digital divide between the information rich and the information poor. The history and background of each of the organisations visited has been included, together with the roles of the various governments involved. Information has been provided on how various international communities have responded to rapidly developing ICT initiatives, while a final chapter provides Findings and Conclusions followed by Recommendations.

Researchers in adult and community education in particular would find the book to be of excellent value. There are numerous examples covering the providers of public access ICT networks, including statistical information on each provider, both at the author's home-base in the UK as well as in the USA and Canada.

The important use of volunteers is noted throughout the book, together with the provision of sources of funding for the various adult and community education organisations in which the volunteers work.

The training of volunteers, as well as members of the community, has been well covered and funding sources for these activities

are often included. Many community organisations receive free software from large companies to run their operations and training is often provided in the use of this software. The majority of these community-based organisations provides IT training specifically for low income and disadvantaged members of the community, while the actions taken by governments and private foundations to address this issue have been highlighted.

In his description of communities, the author cites MSN's Newsweek, 22 August 2005, in which is described the latest cohort of college students: 'They grew up digital: with PCs, broadband and cell phones at the ready. Likelier to reach for Google than for a dictionary, they live-journal their days and photoblog their snaps, trade music and swim in a sea of messages…' (p. 132).

The author comments on various community and family service organisations which address the needs of people with disabilities, children at risk, parents under stress, and people in independent living situations. Attention is drawn to the importance of personal contacts and wide-ranging networks as an aid to the effectiveness of establishing and running community organisations.

By way of illustration, numerous examples have been provided where community-based organisations have been successful only through the use of these networks. Many success stories are described throughout the book illustrating the effectiveness of networking and personal contacts.

The book does an excellent job of providing masses of data for researchers to wade through, but this voluminous data might pose restraints upon the casual reader trying to distinguish between the story and the statistics.

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